



**MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2024**

**DATED NOVEMBER 26, 2024**

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## INTRODUCTION

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The following management's discussion and analysis ("**MD&A**") has been prepared as of November 26, 2024, and is related to the unaudited condensed interim consolidated financial results of Giyani Metals Corp. ("**Giyani**" or the "**Company**") for the three and nine months ended September 30, 2024. This MD&A has been prepared in compliance with section 2.2.1 of Form 51-102F1, in accordance with National Instrument 51-102 – Continuous Disclosure Obligations. This MD&A should be read in conjunction with the Company's unaudited condensed interim consolidated financial statements ("**Interim Financial Statements**") for the three and nine months ended September 30, 2024, together with the notes thereto. The Interim Financial Statements have been prepared in accordance with International Financial Reporting Standards ("**IFRS**"), including International Accounting Standard 34, Interim Financial Reporting, as issued by the International Accounting Standards Board). In this MD&A, unless otherwise indicated, all references to "dollars", "\$" or "CAD" are to Canadian dollars, all references to "USD" are to United States dollars, and all references to "ZAR" are to the South African rand. "Q1", "Q2", "Q3" and "Q4" refer to the three months ended March 31, June 30, September 30, and December 31, respectively. "YTD" refers to the nine months ending September 30, 2024. Unless otherwise indicated, all comparisons of results for Q3, 2024 and YTD, 2024 (three and nine months ended September 30, 2024) are compared against results for Q3, 2023 and YTD, 2023 (three and nine months ended September 30, 2023).

For the purposes of preparing this MD&A, management, in conjunction with the board of directors of the Company (the "**Board**"), considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of Giyani common shares; (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

Certain information and discussion included in this MD&A constitutes forward-looking information. Readers are encouraged to refer to the cautionary notes contained in the section Forward-Looking Statements at the end of the MD&A.

Additional information and corporate documents may be found on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca), and the Company's website at [giyanimetals.com](http://giyanimetals.com).

Mr. Justin Taylor, CEng FIMMM QMR B.Sc Eng (Chem), is a qualified person ("**QP**"), as defined by National Instrument 43-101 ("**NI 43-101**"). Mr. Taylor is the Company's Process Engineering Manager and has reviewed and approved the scientific and technical content contained in this MD&A but is not independent for the purposes of NI 43-101.

Mr. Luhann Theron, MSc., Pr.Sci.Nat. 400184/15, of Lambda Tau is registered with the South African Council for Natural Scientific Professions ("**SACNASP**") and last visited the K.Hill Project site in September 2024 and is a QP, as defined by NI 43-101. Mr. Theron is the Chief Geologist for the Company and has reviewed and approved the scientific and technical content contained in this MD&A but is not independent for the purposes of NI 43-101.

Giyani was incorporated under the Canada Business Corporations Act on July 26, 2007, and continued under the British Columbia Business Corporations Act on August 4, 2010. The Company is a reporting issuer in British Columbia, Alberta and Ontario and trades on the TSX Venture Exchange ("**TSXV**") under the symbol "**EMM**" and on the Frankfurt Stock Exchange under the symbol "**KT9**" and its registered address is Suite 1700, Park Place, 666 Burrard Street, Vancouver, BC, V6C 2X8.

## COMPANY OVERVIEW AND STRATEGY

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Giyani is focused on becoming a dominant western-world producer of sustainable, low carbon high purity battery-grade manganese for the electric vehicle ("**EV**") industry. The Company has developed a hydrometallurgical process to produce battery-grade high-purity manganese sulphate monohydrate ("**HPMSM**"), a lithium-ion battery ("**LIB**") cathode precursor material critical for EVs, directly from ore supplied by the Company's own manganese oxide ("**MnO**") deposits. The Company projects include the K.Hill Battery-Grade Manganese Project ("**K.Hill Project**" or "**Project**"), the Otse MnO prospect ("**Otse**") and the Lobatse MnO prospect ("**Lobatse**"). The K.Hill Project, Otse, and Lobatse are located in the Kanye Basin of south-eastern Botswana (the "**Kanye Basin Prospects**") and held through Menzi Battery Metals (Pty) Limited ("**Menzi**"), a wholly-owned subsidiary of Giyani.

The Company's flagship asset is the K.Hill Project, which is projected to produce HPMSM from 2027, using Giyani's

ore as feedstock for a processing facility that will be built adjacent to the mine location. The same ore is also being used as feedstock for Giyani's pre-commercial demonstration plant ("**Demo Plant**") which is under construction in South Africa. Once in production, the K.Hill Project is expected to be one of the largest producers of HPMSM globally delivering ethical, sustainable, low carbon product to the international battery supply chain.

Giyani is committed to environmental and social responsibility, sustainable business practices with a focus on reducing greenhouse gas ("**GHG**") emissions associated with the Project, its operations and its supply chain. As an industry, EV manufacturers are implementing strategies to identify supply chains with reduced carbon footprints, full traceability and sustainable environmental, social and governance ("**ESG**") practices which are aligned with the Company's policies.

Consistent with the Company's commitment to sustainable and responsible mining practices, Giyani is a member of the International Manganese Institute, European Battery Alliance as well as the UK's Critical Minerals Association.

## OUTLOOK

In the first half of 2024, the Company closed a US\$26 million funding package comprised of US\$10 million from ARCH Sustainable Resources Fund LP ("**ARCH**"), and US\$16 million from the Industrial Development Corporation of South Africa Limited (the "**IDC**" and the "**IDC Facility**"). These strategic partners bring experience in developing projects in Africa and demonstrate technical and financial confidence in Giyani resulting from the extensive due diligence both have undertaken on the Project. ARCH and the IDC provide Giyani a long-term investment horizon and additional project financing capabilities.

Advancing the key workstreams listed below during 2024 and 2025 will be critical for the Company's progression as a battery metals development company.

- Construction, commissioning and operation of the Demo Plant to produce HPMSM samples for potential offtakers.
- HPMSM product qualification and acceptance leading to commercial offtake contracts, a key component of project financing.
- Commencement of technical study-work targeting production efficiencies, operating cost reductions and process technology development, informed by the Demo Plant operation, to be integrated into the ongoing definitive feasibility study ("**DFS**") for the K.Hill Project.
- Receipt of the mining licence ("**ML**") (granted in September 2024) and other permits (EIAs for external infrastructure) required to continue advancing the K.Hill Project in Botswana
- Acknowledgement of the Special Economic Zone ("**SEZ**") status by the Special Economic Zone Authority of Botswana (the "**SEZA**").
- Continued evaluation of the resource potential and integration options for Otse as an additional feed source for the commercial scale plant, and evaluating the potential for a project life beyond 50+ years.
- Engagement and evaluation of potential project financiers ahead of a final investment decision ("**FID**").
- Continue to augment the systems for the Company to function as a focused, efficient, low carbon and risk conscious business.

## Q3 2024 HIGHLIGHTS

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### CORPORATE & FINANCIAL

On September 12, 2024, announced the appointment of Charles FitzRoy as Chief Executive Officer ("**CEO**") and President, succeeding Danny Keating.

On September 30, 2024, the Company announced that CEO Charles FitzRoy purchased 86,200 ordinary shares at an average price of CAD\$0.091 per share, and Chief Financial Officer ("**CFO**") Eugene Lee acquired 100,000 ordinary shares at an average price of CAD\$0.101 per share. Following these transactions, the CEO holds 86,200 shares and the CFO holds 1,947,266 shares, representing approximately 0.03% and 0.71% of the Company's issued share capital respectively.

## **K.HILL PROJECT**

On July 16, 2024, with further details provided on September 18, 2024, the Company announced the successful acquisition of surface rights leases for the K.Hill Project and the planned solar farm, covering approximately 1,010 hectares from the Ngwaketse Land Board in the southern district of Botswana. These leases, secured under the Botswana Mines and Minerals Act, are valid for an initial 15-year period and can be renewed multiple times, with each renewal extending up to 25 years. The surface rights give Giyani the exclusive right to develop on the sites and to access sub-surface water over the 25-year period.

On August 1, 2024, the Company announced that it had completed field work for a 3,185m (61 hole) infill drilling program at the Project. The information gathered from this program is expected to provide the basis for an updated Mineral Resource Estimate (“MRE”) to be included in the 2025 DFS including sufficient Measured Mineral Resource for the initial five years of mining operations to support the typical tenure of project finance debt facilities.

On August 7, 2024, the Company announced that it had entered into two agreements to revise the original agreement with MET63 (Pty) Ltd (“MET63”). The revised agreement concludes the FIDIC contract, and in preparation for the commissioning phase transfers responsibility and control of the Demo Plant directly to Giyani Metals South Africa (“GMSA”), together with the continued and on-going engagement of MET63’s team to provide services and support to GMSA.

On August 7, 2024, the Company provided an update on the Demo Plant. Substantial progress has been made at the Demo Plant in July with the installation of five additional modular process skids (“Process Modules”). Seven of the nine Process Modules have now been installed, and:

- all nine bases/footings for the Process Modules have been installed
- all eight ventilation circuits have been installed
- instrumentation & wiring is complete on the first Process Module and is in progress on the second Process Module
- the utility steam systems have been successfully pressure tested, and concrete has been poured for the external waste storage tank system
- assembly of the remaining Process Modules continues offsite for transportation and installation at the Demo Plant

The Project remains on track for commissioning and production of battery-grade manganese in Q4 2024 for offtaker testing and qualification.

On September 18, 2024, Giyani announced an update on the DFS which is expected to be completed in 2025. The DFS will incorporate an updated MRE and utilise data from the Demo Plant, ongoing optimisation testwork to minimise any environmental impact and maximise the Project value. Ongoing testwork is aimed at reducing operational costs, carbon emissions and reagent use.

On September 25, 2024, Giyani announced that the Demo Plant in Johannesburg had entered the detailed fit-out phase, with all Process Modules installed and cabling and piping underway in preparation for commissioning. Concurrent metallurgical test work at CM Solutions aimed to optimize the flowsheet and eliminate hydrofluoric acid (“HF”) to improve safety. Giyani has engaged Minopex, a DRA Global company, to operate the Demo plant, which will run as a continuous process flow. This consistent operation will demonstrate the ability to produce consistently HPMSM that meets offtaker requirements. As a scaled model of the planned Commercial Plant in Botswana, the Demo Plant will provide valuable insights for optimization ahead of full-scale operations. Production of up to 600kg of HPMSM per day remains on track for Q4, 2024, with product to be supplied to offtakers for testing and qualification.

On October 10, 2024, the Company announced the renewal of six prospecting licences (“PLs”) in Southern Botswana, following a submission on June 28, 2024, and a presentation to the Botswana Ministry of Mines. The renewed licences are valid until September 30, 2026 and cover an area of 1,884 km<sup>2</sup>. PL322/2016 which hosts the Project and covers the area in the Company’s recently acquired mining licence was retained. PL339/2016 (77 km<sup>2</sup>) was relinquished as remote sensing surveys conducted in Q2 2024 detected limited geological anomalies. These surveys have revealed new manganese oxide ore targets across multiple licences, reinforcing Giyani’s exploration strategy and demonstrating the potential to enhance battery-grade manganese production beyond the 60-year project life outlined in the 2023 PEA. Giyani remains committed to exploring additional ore sources at K.Hill, Otse, Lobatse, and Mogobane to support the Project’s long-term success.

On October 22, 2024, the Company announced that the Demo Plant in Johannesburg is now in the commissioning phase. Progress since the last announcement (September 25, 2024) includes the commissioning of the steam boiler,

plant air supply system, and the demineralised water plant. The main control station hardware for the Yokogawa Distributed Control System (“DCS”) has been installed, and the control room has been powered up. The DCS will be used to control the Demo Plant, enabling the facility to operate as a continuous process flow, rather than on a batch basis. The exciting milestone of first drive start and stop from the DCS has been achieved.

On October 31, 2024, the Company announced that it had hosted an equipment handover ceremony in collaboration with the Bangwaketse Paramount Chief, the Kanye District Council, the Kanye District Health Management Team (DHMT), and representatives of People Living with Disabilities (PLWD) at the Main Kgotla of the Bangwaketse people. The event, reflects Giyani’s ongoing pledge to support disadvantaged members of the Kanye and Bangwaketse communities.

On November 14, 2024, the Company announced continued progress on the commissioning phase of the Demo Plant including the completion of dry commissioning for the majority of systems (including the complex crystalliser and progress through wet commissioning. The Company announced the ISO-certified independent laboratory is near complete.

The Company’s press releases are available on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca) and on the Company’s website at [giyanimetals.com](http://giyanimetals.com).

## K.HILL PROJECT DEVELOPMENT

### BOTSWANA PROSPECTING LICENCES

During 2022, the Botswana Department of Mines (“DoM”) approved the Company’s request to renew eight PLs for a duration of two years. The total licence area contained a footprint of 1,961 km<sup>2</sup>.

On October 10, 2024, the Company announced the renewal of six PLs which are valid to September 30, 2026. One remaining licence (PL258/2017) is valid until December 31, 2024, and an application for renewal has been submitted to DOM and awaiting feedback.

The Company relinquished PL339/2016 (77km<sup>2</sup>) as remote sensing surveys conducted in Q2 2024 detected limited geological anomalies.

PL Number	Licence Area (km <sup>2</sup> )	District	Expiry Date
PL258/2017	95	South-East District	December 31, 2024
PL297/2016	483	Southern District	September 30, 2026
PL298/2016	479	South-East District	September 30, 2026
PL322/2016	438	Southern District	September 30, 2026
PL336/2016	118	Southern District	September 30, 2026
PL337/2016	144	Southern District	September 30, 2026
PL338/2016	127	Southern District	September 30, 2026

### ENVIRONMENTAL IMPACT ASSESSMENT (“EIA”) DEVELOPMENTS

In January 2020, the Company appointed Loci Environmental (Pty) Ltd (“Loci”), a Botswana based company, to conduct an EIA for the K.Hill Project. The EIA process, as prescribed by the Botswanan legislative requirements, comprises three stages:

A screening stage (Project Brief) where the DEA decides whether a project requires an Environmental Management Plan (“EMP”) or requires a detailed EIA. The DEA determined that the K.Hill Project requires a detailed EIA.

A scoping stage (Public Consultation and Terms of Reference (“ToR”)) which is a process of interaction between interested and affected parties, government agencies, and proponents to develop the scope of work for the EIA ToR. On December 3, 2020, the DEA acknowledged the Scoping Report, submitted by Loci on behalf of Menzi, complied with the parameters of the Botswana Environmental Assessment Act (“Act”) and gave authorization to proceed with the detailed EIA. This completed the scoping stage of the EIA.

A key task of the scoping stage public consultation process was meeting with the Paramount Chief of Bangwaketse, tribal administration officials and community representatives. A meeting took place at the main Kgotla in Kanye, Southern Botswana in August 2020. During meetings with stakeholders, information was shared with the attendees

about (i) the K.Hill Project; (ii) the EIA process; (iii) potential E&S impacts (identified to date) and how these can be mitigated for all phases of the mine life (construction through to closure); and (iv) invited attendees to ask questions, make comments and raise any concerns. The feedback from these early meetings with the public was very positive.

A detailed EIA stage leading to an EIS which includes conducting a series of specialist studies covering archaeology and cultural heritage, biodiversity, hydrogeology and geochemistry, hydrology, traffic, noise, air quality, landscape and visual amenity, waste management, health, social, and mine closure. The EIS report, which was prepared in compliance with Section 9 of the Act by Loci, was first submitted by Menzi to the DEA on March 31, 2023. The DEA issued its initial comments to Menzi's EIS submission on June 13, 2023, and Menzi subsequently responded to the DEA's comments in a further iteration of the EIS report which was submitted to the DEA. The EIS was approved on December 19, 2023, and the DEA approved the EIA and issued the EA with a validity period of 25 years, subject to renewal thereafter.

In addition to compliance with national EIA requirements, Giyani is committed to conforming with the requirements of the international lender communities and Good International Industry Practice, including the International Finance Corporation ("IFC") Performance Standards on Environmental and Social Sustainability (IFC 2012) and Equator Principles 4. An environmental and social action plan was prepared by the Company to address non-conformity to these standards and is being implemented.

The Botswana Department of Environmental Affairs ("DEA") approved the EIA and issued an environmental authorisation ("EA") with a validity period of 25 years on December 19, 2023, for the K.Hill Project, subject to renewal thereafter. The EA over the K.Hill Project was issued following the conclusion of a comprehensive EIA and environmental impact study ("EIS") which included a series of specialist studies covering archaeology and cultural heritage, biodiversity, hydrogeology and geochemistry, hydrology, traffic noise, air quality, landscape and visual amenity, waste management, health, social, and mine closure.

The Botswana Communications Regulatory Authority ("BOCRA") communications tower and Water Utilities Corporation ("WUC") water reservoirs currently located within the K.Hill Project will need to be relocated. New sites have been identified for the structures and applications will be made in accordance with environmental legislation. Due to the proposed Project schedule, and the need for an EA, the relocation of infrastructures will require an EIA or EMP. The Process for the BOCRA tower commenced in August 2024 and the BPC Powerline commenced in October 2024. The EIA for the WUC will commence in 2025 once the final water use has been agreed. Agreements will be drafted between Menzi and BOCRA (for the relocation of the tower) and between Menzi and WUC (for the relocation of the water reservoirs) that define roles and responsibilities for each party.

## ENVIRONMENTAL AND SOCIAL RESPONSIBILITY UPDATE

Giyani developed an ESG and carbon management strategy, to strive towards a reduction in carbon emissions and achieving carbon neutrality. To date, the Company has concluded a life cycle assessment ("LCA") study in 2022 to assess and determine the potential GHG emissions and resultant global warming potential from the anticipated production of HPMSM at the K.Hill Project.

Giyani's social engagement in Botswana includes support for the local communities and active participation in community engagements. This includes attending Kgotla meetings called by the Chiefs and the Village Development Committee in the Kanye region and frequent consultations with the community to provide project updates. The Kanye members of parliament and council members are also updated on the project progress.

On July 25, 2024, Giyani management attended an event organized by the GaMmaleema Culture Project. Giyani supported the GaMmaleema Culture Project by donating several hundred blankets and pledging to purchase medical equipment including wheelchairs, crutches and walkers for community elders and people living with disabilities in the Kanye and Bangwaketse communities of BWP100,000. Giyani fulfilled its pledge and presented the medical equipment to the community at a handover ceremony held in October 2024.

## DEMO PLANT

In Q1 2021, the Company made the strategic decision to develop a process flowsheet to produce HPMSM, (used in the manufacturing of LIB cathodes) directly from Giyani's MnO ore. This flowsheet was used in the previous feasibility study and the design of the Demo Plant. In Q3 2022, the Company announced preliminary results of the metallurgical test work noting successful production of HPMSM at a purity of 99.97% and with Mn content greater than 31.5%.

In Q4 2021, the Company announced that the metallurgical test work and final process flowsheet had been completed through to the crystallizer feed liquor stage at Mintek's facilities in South Africa. Process Plant Technology (Pty) Ltd was then engaged to undertake the crystallization test work to finalize the overall process flowsheet for the previous

feasibility study and Demo Plant.

Following a detailed review of technical parameters and design objectives, MET63 confirmed acceptance of the process flowsheet as the basis for the engineering of the Demo Plant.

In H1 2022, the Company placed orders for a 15 m tall crystallizer set consisting of an evaporator and a crude and pure crystallizer allowing the Demo Plant to be operated on a continuous production process, mirroring the full-scale commercial plant (“**Commercial Plant**”) expected to be built in Botswana. Depending on feedstock, the Demo Plant is designed to produce up to 600 kg per day of dry HPMSM product.

In Q3 2022, the Company signed the design-build contract with MET63 for the construction of the Demo Plant in South Africa (the “**MET63 Agreement**”). The contract covers the engineering, construction and commissioning of the Demo Plant, on an open book and cost-reimbursable basis with an estimated capital expenditure cost of approximately US\$9.2 million. MET63 is entitled to additional incentives if the Demo Plant is delivered on time, within budget and production meets product quality specifications. The Met63 Agreement was subsequently revised by two agreements, as announced in Q3 2024.

As part of the procurement process, Giyani also entered into an agreement with Yokogawa Electric Corporation, a leading global provider of industrial automation and test and measurement solutions, to provide a Centum VP distributed control system (“**DCS**”). The agreement forms part of a wider commercial relationship being developed with Yokogawa to provide advanced automation control systems to Giyani within an attractive fixed budget package. The DCS will give the Demo Plant greater functionality and allow better transfer of programming and data from the Demo Plant to the Commercial Plant.

In Q2 2023, the Company announced the delivery of 100 t of K.Hill manganese oxide ore to the Demo Plant site to provide representative feedstock for the processing and production of HPMSM for qualification by potential offtakers. The 100 t subsample was selected from over 200 t of ore collected from three outcrops around the Project resource, and this subsample was crushed and packed into one-tonne bags and delivered to the Demo Plant. The processing of this ore through the Demo Plant will be crucial to demonstrating how the Company’s low carbon process can adapt to the variability of K.Hill Project ore. Consistently producing battery-grade HPMSM will be critical in qualifying the Company’s product with potential offtakers.

Also, in Q2 2023, the crystallization unit was installed and key equipment deliveries including the ball mill, classification screen, filter presses, boiler, and the product dryer were made to the Demo Plant site.

During Q3 2023, the skids of the Demo Plant were built, and the majority of the steel tanks were ordered and manufactured. Further, the functional specification and automation system programming progressed, and instruments procured.

During Q4 2023, equipment procurement packages were awarded for pumps, valves and agitators. All stainless and mild steel vessels were completed and accepted and were scheduled for delivery to the Demo Plant site. Packaging system requirements were developed and proposals were received for an on-site laboratory and for reagents supply. In addition, the safety plan for commissioning and operating was approved.

During Q1 2024, the majority of remaining equipment procurement packages were awarded and the main contracts for the mechanical, electrical and civil contractors were executed. The final construction of the Demo Plant skids in the mechanical contractor’s workshop commenced. Programming of the automation system was advanced during the quarter. The engineering for the packaging system was completed and has gone into procurement.

During Q2 2024, the construction of the Demo Plant accelerated. The Demo plant floors were completed and epoxy lined in required zones. Civil works were undertaken and installation of the boiler and compressor and the main steam line was completed, with the line pressure-tested and certified. The ventilation system was near completion and 22 tanks were delivered for installation. The crystallizer skid neared completion and two additional skid bases were installed.

During Q3 2024, construction progressed rapidly towards full completion, with all mechanical equipment installed, and the majority of piping, cabling and wiring in place. Following construction completion, the project will swing over into the commissioning phase. Completion of commissioning is on track to allow production to commence in Q4, with material ready for delivery to potential offtakers during the same period.

## **K.HILL PROJECT MINERAL RESOURCE ESTIMATE**

### **Development of the K.Hill Project MRE and 2024 exploration work**

A previous feasibility study was completed that described the exploitation of the northern part of the K.Hill Project deposit using conventional open pit mining to produce HPMSM directly from ore in a hydrometallurgical manufacturing facility adjacent to the mine.

A follow-up infill drilling program was completed in August 2022 and included 75 reverse circulation (“**RC**”) holes comprising 6,116 m and seven diamond drilling (“**DD**”) holes comprising 217 m. The aim of this drilling campaign was to increase the amount of drilling in the south and decrease the spacing between drillholes on a regular grid. A few holes were drilled to extend the drilling in the south. This enabled the estimation and reporting of the 2023 MRE by CSA:

- Inferred Mineral Resource – 8.6Mt at 15.2% MnO using a 7.3% MnO cut-off.
- Indicated Mineral Resource – 6.1Mt at 14.1% MnO using a 7.3% MnO cut-off.

As a result of the material increase of the total mineral resource inventory, the Company prepared the 2023 PEA to illustrate the economic potential of the K.Hill Project with the longer project life. See details in “*PRELIMINARY ECONOMIC ASSESSMENT*” section below.

In April 2024, the Company has commenced a field work campaign, including an infill drilling program which is expected to add more geological and geochemical information to the database to update the geological model, the block model and the Reasonable Prospect for Eventual Economic Extraction pit optimization. The program consists of approximately 2,500 m and 61 drill holes and was recently completed with a total of 3,185 m as announced on July 31, 2024. The MRE under development (the “**2024 MRE**”) is expected to contain classification of ore material at Measured, Indicated and Inferred levels, but is not expected to materially alter the total mineral resource inventory in the 2023 MRE. The 2024 MRE is expected to be incorporated into the DFS which is expected to be finalized in 2025.

### **2023 MRE**

In July 2023, Giyani announced an updated MRE (the “**2023 MRE**”) prepared by CSA Global South Africa, an ERM Group company (“**CSA Global**”), in accordance with NI 43-101, using data from 187 RC and DD holes from all drill campaigns conducted on the Project since 2018, totalling 10,710 m. This additional drilling included 40 step-out holes along strike into a previously untested, but mineralized, section to the west and to the south of previous drilling campaigns.

This collated and complete set of drilling data, together with new density determination programs and updated optimization parameters for the constrained pit shell, resulted in a material conversion of Inferred Mineral Resources to Indicated Mineral Resources. Indicated Mineral Resources increased more than 300% and Inferred Mineral Resources increased almost 100% compared to the February 2022 MRE which was based on data from 115 RC and DD holes totalling 4,793 m of drilling (the “**2022 MRE**”). See Figure 1 below.

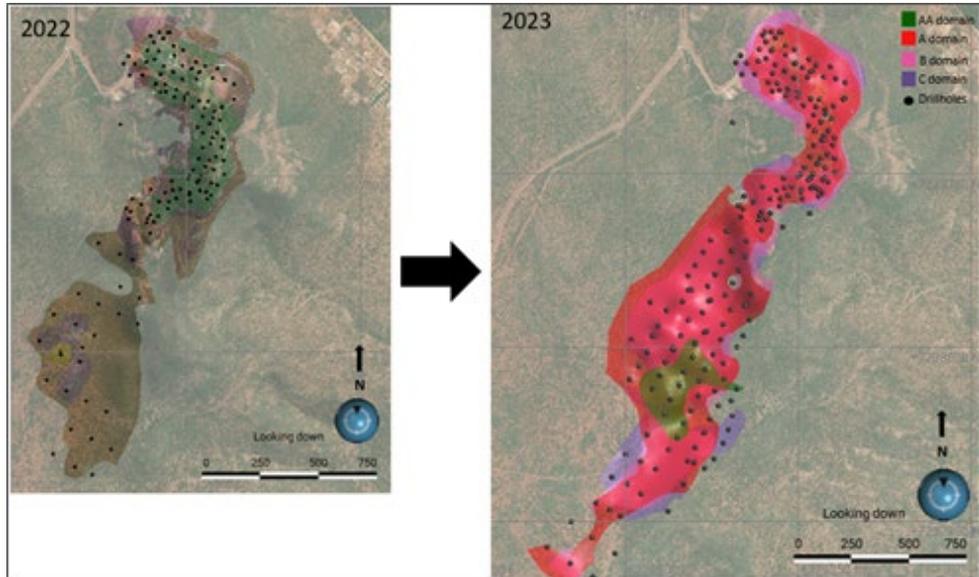


Figure 1: Holes used in the February 2022 MRE compared to the holes used in the updated July 2023 MRE

The reported 2023 MRE has been restricted to all material classified and located within an optimized pit shell based on market data within the 2023 PEA (defined and described below). The pit shell also used various technical economic parameters, derived from ongoing technical studies for the Project. This represents the material which CSA Global considers having reasonable prospects for eventual economic extraction.

#### K.Hill Project MRE Statement as of July 2023 (at a cut-off grade of 7.3% MnO)

Mineral Resource Classification	Tonnage (Mt)	Grade (% MnO)	Contained MnO (Mt)	HPMSM Equivalent (Mt) <sup>1</sup>
Indicated	8.6	15.2	1.3	3.1
Inferred	6.1	14.1	0.9	2.1

#### 2023 MRE Notes:

- The Mineral Resource has been classified and reported under the guidelines defined by the Canadian Institute of Mining, Metallurgy and Petroleum in their document "CIM Definition Standards for Mineral Resources and Mineral Reserves" of May 2014.
- Mineral Resources are not Mineral Reserves and have not demonstrated economic viability.
- Mineral Resources are stated as in situ dry tonnes; figures are reported in metric tonnes.
- Figures have been rounded to the appropriate level of precision for the reporting of Mineral Resources.
- Estimation has been completed within 6 different mineralization domains.
- Mineral Resources are reported assuming open pit mining methods.
- The Mineral Resource is reported within a conceptual pit shell determined using a price of US\$3,800/t HPMSM (equivalent to US\$9,054/t MnO), conceptual parameters and costs to support assumptions relating to reasonable prospects for eventual economic extraction.
- The Mineral Resource is reported at a cut-off grade of 7.3% MnO.
- The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. CSA Global is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other any other relevant factors affecting the MRE.

<sup>1</sup> Before processing recoveries are applied.

- j) HPMSM price quoted is based on 2022 market data, which was available at the time of reporting the Mineral Resource. Additional pricing information will be available for input into subsequent technical studies, and this may impact on the Mineral Resource reported.

CSA Global reported the 2023 MRE using a cut-off grade of 7.3% MnO, which offers the Company greater flexibility in its mine planning and grade scheduling to optimize the feed grade to the Commercial Plant. The table below shows the estimated block model at various cut-off grades.

Cut-off Grade (MnO%)	Tonnage (Mt)	Grade (MnO%)	Contained MnO (Mt)	HPMSM Equivalent (Mt) <sup>2</sup>
7.3	14.7	14.7	2.2	5.2
12.0	8.7	18.1	1.6	3.8
13.0	7.3	19.1	1.4	3.4
14.0	6.1	20.3	1.2	2.9

Note: This tabulation does not represent a Mineral Resource and only serves to illustrate tonnage, grade and content scenarios at various cut-offs within the reporting pit shell.

#### 2023 MRE QP / NI 43-101 Disclosures

The 2023 MRE was carried out by Mr. Anton Geldenhuys (MEng), a registered Professional Natural Scientist (SACNASP, membership number 400313/04) formerly of CSA Global, who is an independent QP as defined by CIM Definition Standards for Mineral Resources and Mineral Reserves in accordance with NI 43-101. Mr. Geldenhuys is a geoscientist, is qualified as a geologist (Honours) and engineer (Masters) and has over 22 years of relevant industry experience. Mr. Geldenhuys is a member in good standing of SACNASP and has sufficient experience relevant to the commodity, style of mineralization and activity which he is undertaking to qualify as a QP under NI 43-101.

#### PRELIMINARY ECONOMIC ASSESSMENT

In July 2023, the Company announced the results of its PEA for the K.Hill Project (“2023 PEA”) following the release of the 2023 MRE. The 2023 PEA was prepared by CSA Global in accordance with NI 43-101. Highlights include:

- Base Case post-tax NPV<sub>8%</sub> of US\$984 million (C\$1.3 billion) and post-tax internal rate of return (“IRR”) of 29%.
- The 2023 MRE allows for high-grade mine scheduling and an average plant feed grade of 19.1% MnO in the first 5 years of production, with an average grade of 17.3% for the first 25 years of production.
- Base Case life of project (“LOP”) is 57 years with total production of 3.6 million tonnes of HPMSM.
- Upside Case post-tax NPV<sub>8%</sub> of US\$1.53 billion (C\$2.1 billion) and post-tax IRR of 32.9% over a 25-year LOP.
- Total initial capital expenditure of US\$284 million, with an additional US\$208 million of expansion capital required in Year 4 of the Upside Case.

#### 2023 PEA Operational and Economic Highlights

The 2023 PEA was prepared in accordance with NI 43-101 for the disclosure of material information to meet the requirements of a PEA level of study and disclosure as defined in the regulations and supporting reference documents. The effective date of the report is July 13, 2023.

A summary of the key parameters of the Base Case is presented below. Unless otherwise stated, all financial figures are quoted in US dollars. The Project Economics and Project Cash Flows are reported on a post-tax basis.

<sup>2</sup> Before processing recoveries are applied.

Metrics	Units	Base Case		
<b>Project Economics</b>				
NPV at 8% discount rate	US\$M	984		
IRR	%	29.4%		
Cumulative cash flow, undiscounted	US\$M	5,283		
<b>Project Production</b>				
		<b>Year 1-5</b>	<b>Year 1-25</b>	<b>LOP</b>
Total mineralized material mined	Mt	2.3	5.8	11.1
Average plant throughput rate	ktpa	170	194	196
Average plant feed grade	% MnO	19.1%	17.3%	15.2%
Total HPMSM produced	kt	341	1,767	3,561
LOP	Years	57		
<b>Net Pricing Assumptions</b>				
Average realized HPMSM price (Yr 1 – 5)	US\$/t	3,559		
Average realized HPMSM price (Yr 6 onwards)	US\$/t	3,780		
<b>Capital Expenditure</b>				
Total initial capital expenditure (incl. contingency)	US\$M	284		
Total sustaining capital	US\$M	18	142	288
<b>Project Cash Flows</b>				
Total revenue	US\$M	1,214	6,620	13,387
Total operating costs (incl. royalty)	US\$M	579	2,905	6,458
Total EBITDA	US\$M	635	3,715	6,929

Notes: See Project Summary

An Upside Case for the K. Hill Project has also been considered, with an additional production line from Year 5 of operations taking total feed capacity to 400,000 tonnes per annum (“t<sub>pa</sub>”). The Upside Case requires US\$208 million of additional capital for the expansion, part of which can be supported from Project free cash flow.

The result is an Upside Case post-tax NPV<sub>8%</sub> of US\$1.53 billion (\$2.07 billion) and post-tax IRR of 32.9%.

The Base and Upside Cases reflect the optionality available to the Company to meet the long-term supply needs of lithium-ion battery offtakers as well as the ability to expand and maintain or grow market share as demand for HPMSM increases. With more stringent regulations in North America and Europe regarding sourcing of EV battery metals, Giyani’s aim is to be the leading global supplier of HPMSM sourced outside of China.

### K.Hill Project Summary

The K.Hill Project was assessed as an integrated mining and processing operation for the on-site production of HPMSM directly from manganese oxide material mined from the K.Hill Project.

The 2023 PEA was based on the 2023 MRE (see “2023 K.Hill Project MRE” section above) which reflected a 310% increase in Indicated Mineral Resources and a 97% increase in Inferred Mineral Resources. This significant increase offers the Company greater flexibility in its mine planning and grade scheduling to optimise the feed grade to the plant, as well as extending the operating life of the Project.

The K.Hill Project orebody will be extracted from an open-pit at K.Hill using conventional truck-and-shovel mining methods and the PEA assumes a contractor mining execution strategy. To optimise the feed to the plant, material mined will be managed through dedicated high/medium/low grade stockpiles, ensuring security of supply to the plant at the highest available grade.

The mining schedule in the PEA focused on early extraction of high-grade material. The increased resources defined in the 2023 MRE offers greater operational flexibility for maintaining higher grade feed to the plant to generate strong early cashflows, while delivering a LOP that is significant for offtakers and customers.

The Base Case assumes a processing plant designed with a throughput capacity of 200,000 tpa and a two-year ramp-up schedule to meet the target recovery, reflecting the sophisticated nature of the K.Hill Project processing plant. It is expected that the Commercial Plant will produce HPMSM from K.Hill Project manganese oxide material using a low carbon hydrometallurgical process which does not require carbon-intensive calcination or electrowinning. Under the Upside Case, a second 200,000 tpa production line will be constructed in Year 4 of the K.Hill Project operation and commissioned in Year 5.

CPM Group LLC (“CPM”), an independent research and consultancy company based in New York and specialist in analysis of the high-purity manganese market, was engaged in 2022 to complete a HPMSM products market outlook study. The 2023 PEA has used CPM’s forecast HPMSM prices, realized at the Project’s gate and net of transportation costs and applicable tariffs, with 50% of sales to the EU (Berlin) and 50% of sales to North America (Detroit). For the purposes of the PEA and valuation, a long-term average price of US\$3,780/t HPMSM has been used from 2030.

Metallurgical processing reagents and raw materials constitute the largest component of processing expenditure based on the plant design criteria and flowsheet to produce HPMSM. During 2021 and early 2022, COVID-19 related disruptions led to an unprecedented rise in international freight rates, which elevated prices for the procurement of reagents. These rates have continued to normalize since then towards pre-COVID-19 levels and updated reagent and raw materials prices have been incorporated into the 2023 PEA to reflect international freight market conditions as of June 2023.

For the calculation of applicable local taxes, the 2023 PEA assumes a dual-taxation structure in Botswana, split between a mining company and a manufacturing company. The mining company will mine and sell manganese oxide material to the manufacturing operation and will be taxed according to the Botswana mining company tax formula (minimum of 22% on operating income with a maximum of 55%). A mining royalty of 3% will be applied to the revenue on the sale of the manganese material to the manufacturing operation. Income from the manufacturing company will be taxed at the Botswana manufacturing tax rate of 15%, assuming a manufacturing development order will be received from the Botswana authorities.

*The reader is advised that the 2023 PEA summarized in this MD&A is preliminary in nature and is intended to provide an initial, high-level review of the Project’s economic potential and design options. The 2023 PEA replaces and supersedes the Company’s previous Feasibility Study on the Project. The 2023 PEA mine plan and economic model includes numerous assumptions and the use of Inferred Mineral Resources. Inferred Mineral Resources are considered to be too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the 2023 PEA will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*

#### **QP / NI 43-101 Disclosures**

Mr. Howard Simpson BSc Eng (Hons), BCom, FAusIMM - CP Mining (membership number 326398), RPEQ, Mining Manager and Consulting Director at CSA Global is a QP as defined by NI 43-101. Mr. Simpson is responsible for the capital and operating cost as well as economic analysis estimates.

Mr. Anton Geldenhuys (MEng), a registered Professional Natural Scientist (SACNASP, membership number 400313/04) formerly of CSA Global is a QP as defined by NI 43-101. Mr. Geldenhuys is responsible for the geology, geological data verification and Mineral Resource estimation.

EUR ING Andrew Carter BSc, CEng, MIMMM, MSAIMM, SME Head of Mining UK & Ireland for Tetra Tech, Inc., is a QP under NI 43-101 and is responsible for the metallurgical test work results, process engineering, process operating costs and plant and infrastructure capital cost estimates in this quarterly MD&A.

Neither CSA Global, Tetra Tech nor the QPs of the 2023 PEA, has or have had previously any material interest in Giyani or the mineral properties in which Giyani has an interest. The relationships with Giyani are independent third party relationships between the client and independent consultants. The 2023 PEA is prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is not contingent on the results of the 2023 PEA.

#### **DEFINITIVE FEASIBILITY STUDY**

The release of the 2023 MRE and 2023 PEA for the K.Hill Project highlighted the inherent value of the Project and the Company is progressing various critical workstreams to move the Project to a FID.

Wood was appointed as lead consultant on the DFS following a competitive selection process assessing technical and engineering capability, manganese experience, team and execution strategy.

The DFS is expected to be complete in 2025 and will run concurrently with the Company's other planned activities of constructing and operating the Demo Plant, securing licences and permits, completing offtake agreements and obtaining project financing. The DFS workstream is split into two phases:

- Phase 1 – Technical Review and Scope Definition: This phase includes an initial technical review of historical work, gap analysis to assess level of engineering and readiness to advance to the DFS phase and a series of trade-off studies to inform the optimised project scope to be advanced to Phase 2. This work was initiated during the second quarter 2024.
- Phase 2 – Definitive Feasibility Study: This phase includes all site investigations, design of all project infrastructure and processing elements and the definition of an AACE Class 3 cost estimate (5% to -15% low, +10% to +20% high) and level of design for the K.Hill Project that comply with NI 43-101 requirements. Data and learnings from the operation of the Demo Plant will be incorporated into the DFS which is expected to meet the requirements of project finance institutions. This work commenced during the third quarter 2024.

Specialist subconsultants Knight Piésold was appointed as the lead Geoscience and TSF consultant and Ukwazi Mining Studies (Pty) Ltd ("**Ukwazi**") was appointed as the lead mining consultant.

The following workstreams were advanced during the third quarter 2024 following the DFS kick-off meeting held in Q2 2024:

- Mining studies by Ukwazi
- Field investigations and geosciences including
  - Hydrology
  - Hydrogeological
  - Geochemical and environmental ground water monitoring holes
  - Geotechnical and civil geotechnical
- A hydrocensus of the immediate project and surrounding areas of all water infrastructure was undertaken and samples collected.
- Hydrological mapping and modeling were initiated during Q3 2024 to assess the floodlines to enable optimal placement of planned infrastructure and stormwater design.
- Tailings Storage Facility ("**TSF**")
  - The TSF design criteria will be concluded in early 2025 once the ground geophysical survey and geotechnical site investigations have been concluded.
- Waste Rock Dump ("**WRD**")
  - The draft WRD design criteria was prepared and site inspections undertaken. The design of the WRD will be undertaken during the first quarter 2025.
- Metallurgical test work
  - Further metallurgical test work was initiated to better inform optimal process definition and reagent selection. Final test results are expected during the latter part of 2024.
  - Process test-work remains ongoing and is expected to be completed during Q4 2024.

## SEZA

The Company initiated discussions with the SEZA regarding the establishment of a Special Economic Zone around the K.Hill Project processing plant. The proposed SEZ offers several benefits, including a corporate income tax rate of 5% for the first 10 years of production and of 10% thereafter. This regime has not been modelled within the PEA.

The formal application for SEZ status was submitted to the SEZA on June 20, 2024. In the third quarter, the Company responded to queries from the SEZA and the Company is waiting upon the SEZA board to meet and review its application. Upon SEZA board approval, the process of declaring the site as a Single Factory Zone will commence and the application for a manufacturing licence will be lodged with the Botswana Ministry of Trade and Entrepreneurship.

## HPMSM MARKET OVERVIEW

HPMSM is a precursor chemical used in the manufacture of cathode active materials ("**CAM**") deployed in rechargeable LIBs. LIBs are used predominantly in EVs and other energy storage applications using various battery chemical compositions determined by the battery manufacturer's requirements for performance, safety and cost. The growing demand for LIBs is being driven by the growth in EV production globally and this growth is expected to expand significantly over the next decade.

The EV market has already seen significant expansion in recent years with total annual sales rising from 2.2 million units in 2019 to 13.9 million units in 2023, a CAGR of 58%<sup>3</sup>, with EV penetration rates for passenger car and light duty vehicles growing from 2% in 2019 to 11% in 2023 and are forecast to hit 55% by 2035.<sup>4</sup> In 2023, close to 55% of the LIB market used nickel-manganese-cobalt (“**NMC**”) formula cathodes, which require differing quantities of HPMSM depending on the ratios between the three elements with total manganese requirement typically varying between 6 – 25 kg per vehicle (metal contained), and about 40% of the 2023 Global LIB market was from lithium-iron-phosphate (“**LFP**”) batteries, whilst in China LFP batteries made up c.63% of the market share in 2023. Recent discussions with OEMs and battery manufacturers outline that market trends outside of China appear to be moving towards reducing the nickel content, removing as much as cobalt as possible and increasing the manganese content in NMC batteries for a variety of reasons, including: price, reducing carbon emissions and ESG concerns for nickel and cobalt compared to manganese.

There are several companies looking beyond traditional NMC and LFP battery chemistries, which are expected to increase the potential demand for battery-grade manganese. The LIB market has seen growing forecast use of higher-manganese chemistries, and in turn an expected reduction of the market share of NMC811 in favor for higher manganese and lower nickel content batteries such as BASF’s NCM-307 and Svolt’s NMx cathodes, which is believed to contain around 94 kg manganese contained.<sup>5</sup> Lithium-manganese-iron-phosphate (“**LMFP**”) technologies, are also gaining momentum; Contemporary Amperex Technology Co. Limited (“**CATL**”), the largest LIB producer globally reported in March 2024 that it has managed to successfully bring its M3P LMFP cell to market and it is becoming increasingly prevalent in EVs in China. A recent report from CATL also revealed that the M3P cell is not strictly an LMFP cell, but a “ternary lithium battery with a phosphate system”. This points to perhaps a blend of NCM and LMFP cathode active material within the cell, which has been reported as a common initial route for LMFP as a way to introduce the new technology in a commercial setting. These chemistries provide several advantages, from reduced battery raw material costs to performance and sustainability improvements.

European CAM producer Umicore confirmed in February 2023 that it had started the industrialisation of its high lithium manganese (“**HLM**”) CAM technology which is manganese-rich (between 60% to 65% manganese)<sup>6</sup>. Umicore already produces NMC cathode materials for high-performance, long-range EVs and commercial production of HLM is targeted to offer better price competitiveness with LFP over the full life-cycle of the LIB. In February 2024, Umicore reinforced that it sees HLM as a potential replacement for LFP or LMFP in the future for more entry- and mass-market kind of applications.<sup>7</sup> It is expected that Umicore would manufacture HLM CAM at its plants in Poland, South Korea, and from its CAM facility that is currently on hold in Canada. HLM can be made on the same production lines as NMC.<sup>8</sup> In 2021, Umicore entered into a non-exclusive patent cross-licence agreement with BASF covering a broad range of CAMs, including HLM, and in March 2023 it announced regulatory approvals for its joint venture with Powercat (part of the Volkswagen Group) for production of CAM and precursor materials in Europe.

Volkswagen’s PowerCo announced on July 11, 2024, that it had signed an agreement with solid-state battery developer QuantumScape that gives the Volkswagen Group’s battery arm a non-exclusive license to mass produce its technology. PowerCo is authorized to manufacture up to 40 gigawatt-hours (“**GWh**”) per year using QuantumScape’s technology with the option to expand up to 80 GWh annually. The company relayed that the expanded capacity is large enough to equip roughly one million electric vehicles with solid-state technology per year<sup>9</sup>. QuantumScape’s solid-state battery benefits from an NMC cathode, and so will require battery-grade manganese.

Topsoe, a global leader in carbon reduction technologies is developing lithium-nickel-manganese-oxide batteries (“**LNMO**”). LNMO is a cobalt-free high-voltage (5V) spinel for use in next-generation lithium-ion rechargeable batteries, which they claim will bring performance on par with state-of-the-art high nickel lithium-ion batteries but at a much lower

<sup>3</sup> BEV and PHEV sales. 1.6m BEV and 0.6m PHEV in 2019, to 9.8m BEV and 4.1m PHEV in 2023. Source Rho Motion EV & Battery Quarterly Outlook.

Q1 2024. Compound Annual Growth Rate (CAGR) calculated for 2019 to 2023 period.

<sup>4</sup> Source: Rho Motion EV & Battery Quarterly Outlook Q1 2024.

<sup>5</sup> Source: CPM.

<sup>6</sup> <https://projectblue.com/blue/news-analysis/793/tesla-begins-validation-of-catl%E2%80%99s-lmfp-cells->

<sup>7</sup> <https://www.bestmag.co.uk/umicore-sees-high-lithium-manganese-as-a-challenger-to-lfp-and-lmfp/>

<sup>8</sup> <https://www.bestmag.co.uk/umicore-sees-high-lithium-manganese-as-a-challenger-to-lfp-and-lmfp/>

<sup>9</sup> <https://www.bestmag.co.uk/umicore-sees-high-lithium-manganese-as-a-challenger-to-lfp-and-lmfp/>

<sup>10</sup> <https://electrek.co/2024/07/11/vw-group-powerco-licensed-mass-produce-quantumscape-solid-state-battery/>

cost and with substantial environmental gains in the supply chain.<sup>10</sup>

Dramatic growth has been seen in battery demand, with an increase from 118 GWh in 2019 to 716 GWh in 2023, with total LIB usage capacity projected to grow to 5,256 GWh by 2035.<sup>11</sup> The regions predicted to see the largest battery manufacture growth are the European Union (“EU”), Asia and North America. Given the position of the K.Hill Project in southern Africa within reach of export terminals in Namibia and South Africa, the new battery growth regions of the EU and North America will be priority markets for the Company. With NMC continuing to be the most popular cathode formulation, and the shift to higher-manganese content NMC chemistries like 721, 622 or 532, consumption of HPMSM is predicted to grow.

At present, the HPMSM market is heavily dominated by Chinese companies, who account for roughly 90% of annual production. Global production of HPMSM during 2023 is estimated to have been approximately 295,000 t with over 90% of HPMSM coming from China.<sup>12</sup> Over the past year, both the United States of America and the EU have looked to impact this reliance, with the Inflation Reduction Act (“IRA”) and European Critical Raw Material Act (“CRMA”), respectively, placing incentives for OEMs and battery producers to diversify their raw material supply chains by increasing the percentage of battery materials that are sourced from countries not classified as Foreign Entities of Concern (“FEOC”), which includes China, Iran, Russia, and North Korea. Current IRA rules require that 80% of raw critical materials going into EVs need to be sourced from non-FEOC countries by December 31, 2026.

HPMSM can be produced directly through the processing of MnO or carbonate ores or through the refining of high purity electrolytic manganese (“HPEMM”) or electrolytic manganese metal (“EMM”), which also has a variety of uses other than LIBs. This EMM refinement process requires high power consumption and may also require the removal and safe storage of highly toxic selenium, which is added in the production of EMM. Giyani’s direct processing of ore to HPMSM requires less power than the refinement of EMM, thus a lower comparative carbon footprint, and also does not create any hazardous selenium-rich by-product. A 2022 study by Minviro estimated that the average GWP of Chinese producers manufacturing HPMSM through the dissolution of EMM was approximately 5.1 kg CO<sub>2</sub> per kg HPMSM, around 60% higher than Giyani. These factors, as well as the opportunity to diversify raw materials supply chain from China have been highlighted by potential customers as key positive considerations for the K.Hill Project.

## **EXPLORATION PROGRAMS**

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### **OTSE PROSPECT**

In 2018, Giyani completed the first phase of DD program at the Otse prospect. The program consisted of seven drill holes for a total of 419 m. Core recovery during this program was very poor and limited geochemical sampling was possible. The same mineralization seen at surface was observed also at 60m depth.

Giyani completed the first phase of induced polarization (“IP”) surveys at the Otse Prospect over two locations namely the Otse North and Otse South sites. The IP surveys were successful in identifying anomalous areas with potential for MnO mineralization. Between September 2021 and December 2021, an RC drilling program was completed consisting of 66 drill holes and 4,155 m. The RC drilling was successful in collecting sufficient sample material for geological logging and geochemical sampling. A resource estimate for the Otse prospect has not been completed.

A second IP survey was completed at the Otse North location in October 2022 in order to extend the areas for drill targets at this location.

### **LOBATSE PROSPECT**

The Lobatse prospect is a site of historical, underground mining activity. In 2018, Giyani completed the first phase of DD at the Lobatse prospect. The program consisted of five drill holes for a total of 304 m. The program was aimed at testing the mineralization at depth. The black shale unit, which hosts the manganese mineralization, was intersected in three of the drill holes. In January 2022, Giyani completed a survey of the historical underground tunnels. The information will assist Giyani with planning and execution of future drilling and exploration activities.

<sup>11</sup> <https://www.topsoe.com/>.

<sup>12</sup> Source: Rho Motion EV & Battery Quarterly Outlook Q1 2024.

<sup>13</sup> Source: International Manganese Institute.

## MOGOBANE AND RAMOTSWA

The Mogobane and Ramotswa prospects are greenfield exploration prospects. The Mogobane prospect is closely related to the Otse prospect, which has shown a similar style of manganese mineralization at surface. No systematic exploration has been completed for these prospects.

## SUMMARY OF QUARTERLY RESULTS

The accompanying Interim Financial Statements have been prepared using IFRS applicable to a going concern, which assume that the Company will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of operations.

The Interim Financial Statements do not reflect the adjustments to the carrying values of assets and liabilities and the reported expenses and statement of financial position classifications that would be necessary should the going concern assumption be inappropriate. Those adjustments could be material. The Company will continue to pursue opportunities to obtain additional capital to fund its exploration and evaluation activities and investments in property, plant and equipment. However, there is a risk that additional capital will not be available on a timely basis or on terms acceptable to the Company.

Selected financial information for this quarter and the previous seven quarters is set out below.

Three months ended	Q3-2024	Q2-2024	Q1-2024	Q4-2023	Q3-2023	Q2-2023	Q1-2023	Q4-2022
	\$	\$	\$	\$	\$	\$	\$	\$
<b>Financial position</b>								
Cash	13,437,451	18,993,269	13,664,238	3,051,144	4,888,950	7,158,567	9,654,726	11,676,017
Current assets	14,644,210	19,857,087	14,764,182	3,500,304	5,020,824	7,301,546	9,794,436	11,878,163
Exploration and evaluation assets	17,223,580	14,868,380	12,955,481	12,386,409	12,984,410	12,745,954	12,748,913	13,055,777
Property, plant and equipment	15,609,986	10,963,013	8,353,660	7,706,015	7,526,388	6,378,062	5,365,801	4,396,445
Total assets	47,477,776	45,688,480	36,073,323	23,592,728	25,531,622	26,425,562	27,909,150	29,330,385
Current liabilities	2,939,081	2,351,132	2,286,994	2,255,553	1,872,594	1,648,403	1,731,659	1,133,481
Non-current liabilities	22,399,479	19,025,680	7,365,992	29,593	42,372	37,401	-	-
Total liabilities	25,338,560	21,376,812	9,652,986	2,285,146	1,914,966	1,685,804	1,731,659	1,133,481
<b>Operations</b>								
Net loss	2,905,530	2,905,240	1,638,256	1,261,154	1,227,529	1,052,902	1,275,045	981,748
Basic and diluted net loss per share	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
Weighted average number of shares outstanding	274,313,330	274,313,330	243,849,311	219,478,095	219,478,095	218,895,061	218,440,908	218,440,908

Changes in the Company's total assets resulted primarily from cash received from the ARCH funding package and capitalized expenditures for the ongoing construction of the Demo Plant and exploration and evaluation activities. The change in the Company's total liabilities reflects the sale of a gross revenue royalty to ARCH ("**ARCH Royalty**") which has been classified as a financial instrument and recorded in the Company's Interim Financial Statements as a financial liability and the amounts drawn under the IDC Facility which has been fair valued at \$14,484,084.

The following table summarizes the Company's corporate, general and administrative expenses.

For the periods ended	For the three months ended		For the six months ended	
	September 30 2024	September 30 2023	September 30 2024	September 30 2023
Management fees	\$ 879,504	\$ 811,698	\$ 1,933,877	\$ 2,122,185
General and administrative	287,182	63,330	641,696	273,796
Director fees	86,516	89,831	512,542	254,985
Accounting and audit	86,033	103,963	366,760	227,284
Legal fees	136,347	4,610	324,415	70,887
Stock-based compensation	(188,722)	94,066	286,252	263,374
Investor relations and marketing	62,661	59,927	284,033	330,945
Travel	30,034	12,353	140,352	69,038
Corporate development	42,832	13,794	108,721	56,943
Filing and compliance fees	8,578	16,178	73,084	57,020
Insurance	18,592	18,021	55,585	57,579
	\$ 1,449,557	\$ 1,287,771	\$ 4,727,317	\$ 3,784,036

### Results of operations for Q3, 2024 and YTD, 2024 comparison with Q3, 2023 and YTD, 2023

- Net loss for Q3, 2024 and YTD, 2024 was \$2,905,530 and \$7,449,026 compared with \$1,227,529 and \$3,555,476 in the comparative period. The overall increase in net loss is due to higher corporate, general and administration expenses, , and finance expenses which are analyzed below and the impact of changes in the fair value of the convertible loan (IDC Facility).
- Management fees for Q3, 2024 and YTD, 2024 were \$879,504 and \$1,933,877 compared with \$811,698 and \$2,122,185 in the comparative period. Management fees are lower as amounts related to personnel engaged on the K.Hill Project, including the Demo Plant, of \$549,182 and \$1,389,476 for Q3 and YTD, 2024 have been capitalized. However, overall staffing expenditures have increased resulting from an increase in head count as Demo Plant construction activities continue to advance.
- For Q3 2024, stock-based compensation was \$(188,722), compared with \$94,066 in the comparative period, as a result of the departure of several consultants and the forfeiture of unvested stock options. YTD, 2024 stock-based compensation totaled \$286,252, an increase from \$263,374 in the comparative period. The YTD, 2024 increase results primarily from the vesting of 6.7 million stock options issued in Q1 2024, partially offset by the impact of forfeitures.
- Director fees for Q3, 2024 and YTD, 2024 were \$86,516 and \$512,542 compared with \$89,831 and \$254,985 in the comparative periods. The increase results from changes made to the board composition during the year.
- Accounting and audit expenses for Q3, 2024 and YTD, 2024 were \$86,033 and \$366,760 compared with \$103,963 and \$227,284 in the comparative period. The year over year increase is attributed to the accounting advisory services engaged to assist the Company in accounting for the IDC Facility and ARCH Royalty.
- General and administrative expenses for Q3, 2024 and YTD, 2024 were \$287,182 and \$641,696 compared with \$63,330 and \$273,796 in the comparative period. The year over year increase is solely attributable to increased head count and activity as the Company advances construction and commissioning of the Demo Plant and progresses the DFS.
- Legal fees for Q3, 2024 and YTD, 2024 were \$136,347 and \$324,415, compared with \$4,610 and \$70,887 in the comparative period. The year over year increase is primarily due to increased corporate activity.
- Net finance expense for Q3, 2024 and YTD, 2024 was \$337,881 and \$1,290,651 compared to net finance income of \$(81,501) and \$(274,452) in the comparable period. The increase arises from the accretion of the financial liability over the K.Hill Project period used in management's analysis and the interest, transaction costs and fees related to the IDC Facility which are recorded in the Interim Financial Statements as funds are drawn. The net finance expense also reflects interest income earned on cash from the ARCH funding and IDC Facility. Cash held in Canada, Botswana and South Africa attracted interest of \$220,293 and \$526,141 in Q3, 2024 and YTD, 2024 compared to \$83,487 and \$279,696 in the comparative period.

### EXPLORATION AND EVALUATION EXPENDITURES

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The exploration and evaluation expenditures incurred by the Company as at September 30, 2024, and December 31, 2023, including amounts to maintain licences, permits and authorizations in good standing, are detailed in the table below:

	September 30 2024	December 31 2023
Opening balance	12,386,409	13,055,777
Exploration and drilling	1,817,650	14,733
Engineering studies	1,063,748	581,868
Environmental studies	9,689	143,858
Geological studies	145,459	128,631
Administrative and other field operations	648,099	24,382
Metallurgical test work and analysis	205,405	6,474
Acquisition costs and permits	69,532	16,188
Foreign exchange	877,589	(1,585,502)
<b>At September 30, 2024</b>	<b>17,223,580</b>	<b>12,386,409</b>

## PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment was \$15,609,986 as at September 30, 2024, and \$7,706,015 as at December 31, 2023. Management's discussion and analysis of the progress and advancements made are described in the Demo Plant subsection above.

## LIQUIDITY AND CAPITAL RESOURCES

As at September 30, 2024, the Company had cash of \$13,437,451 (December 31, 2023 - \$3,051,144). Working capital (defined as current assets less current liabilities) increased to \$11,705,129 (December 31, 2023 - \$1,244,751), reflecting cash provided by financing activities including the IDC Facility and ARCH funding, Shareholders' equity increased to \$22,139,216 (December 31, 2023 - \$21,307,582) resulting from the ARCH Offering (described below) to become a 19.99% shareholder of the Company, an increase in contributed surplus from the issuance of stock options and movements in cumulative translation adjustment offset by an increase of the Company's deficit to \$58,607,159 (December 31, 2023 - \$51,158,133) arising from the ongoing corporate, general and administrative, finance and foreign exchange charges record during the nine months ended September 30, 2024.

The Company's cash flows for the nine months ended September 30, 2024, and September 30, 2023, are summarized in the table and discussed below:

For the periods ended	September 30, 2024	September 30, 2023
Cash used in operating activities	(5,566,199)	(3,275,997)
Cash used in investing activities	(8,823,504)	(3,572,678)
Cash provided by (used in) financing activities	24,776,080	61,807
Increase (decrease) in cash	10,386,377	(6,786,868)
Cash at beginning of the period	3,051,144	11,676,017
Effect of foreign exchange on cash	(70)	(199)
Cash position at end of the period	13,437,451	4,888,950

Cash used in operating activities increased to \$5,566,199 for YTD, 2024, compared to \$3,275,997 during the same period in 2023. The year-over-year increase is due primarily to the increase in general, corporate and administrative activity resulting from the increasing activities of the Company as it advances the K.Hill Project.

Cash used in investing activities increased to \$8,823,504 in YTD, 2024, compared to \$3,572,678 during the same period in 2023. The increase in investing activities in Q3, 2024, reflects the increased expenditures for the construction of the Demo Plant and exploration and evaluation activities using cash provided by financing activities including the IDC Facility and ARCH funding.

Cash provided by financing activities increased to \$24,776,080 in YTD, 2024, compared to \$61,807 in YTD, 2023. The increase in cash provided by financing activities in YTD, 2024 includes \$7,024,514 from the sale of the ARCH Royalty and \$6,120,021 from the net proceeds of the unit offering to ARCH and \$11,672,626 drawn from the IDC Facility.

The Company's capital resources consist of equity, convertible loan and royalty financing. The Company manages its capital structure and makes adjustments in response to changes in economic conditions, the risk characteristics of the Company's assets and business opportunities. To effectively manage the Company's capital requirements, the Company has in place a planning, budgeting, and forecasting process to help determine the funds required to ensure the Company has the appropriate liquidity to meet its operating and growth objectives. The Company is not subject to

any capital requirements imposed by a lending institution or regulatory body, other than Policy 2.5 of the TSXV which requires adequate working capital or financial resources of the greater of (i) \$50,000 and (ii) an amount required to maintain operations and cover general and administrative expenses for a period of 6 months. As of September 30, 2024, the Company is compliant with known requirements including Policy 2.5 of the TSXV.

## **FINANCING**

On November 30, 2023, the Company announced a US\$26 million (\$36 million) funding package and the signing of definitive agreement with the IDC for the ZAR equivalent of US\$16 million (\$22.5 million) up to ZAR300 million in the form of convertible loan facilities. An amended IDC Facility was approved by the TSXV in March 2024. The IDC Facility is available for drawdown until March 31, 2025.

On January 24, 2024, the Company announced it had secured funding of US\$10 million (\$13.4 million) from ARCH and on February 21, 2024, the Company announced the closing and receipt of \$13,440,236 (US\$10 million) from ARCH. The ARCH funding package consists of: (i) a \$6,415,722 (US\$4.8 million) unit offering ("**ARCH Offering**") of 54,835,235 units at \$0.117 per unit, with each unit consisting of one common share and one common share purchase warrant of the Company exercisable at a price of \$0.225 per warrant for five years (subject to acceleration); and (ii) \$7,024,514 or US\$5.2 million for a 2% gross revenue royalty which includes a 1% buy-back provision and an automatic step-down by 0.5% after 20 years or 2.5Mt of HPMSM production. Following completion of the ARCH Offering, ARCH held approximately 19.99% of the Company's issued shares.

The use of proceeds for the US\$26 million (\$36 million) funding package includes the construction and operation of the Demo Plant as well as the activities to complete the DFS and is currently expected to fund the Company to FID. However, additional funding will be required for the development of the infrastructure, mining and processing facilities required for the K.Hill Project.

### **Terms of the IDC Facility**

#### ***Loan Amounts***

The IDC Facility is ZAR300,000,000 (\$22.5 million)

ZAR234,375,000 (\$17.6 million) is available to Giyani Metals South Africa Proprietary Limited ("**GMSA**"), a wholly owned subsidiary of Menzi, (the "**GMSA Facility**").

ZAR65,625,000 (\$4.9 million) is available to Menzi (the "**Menzi Facility**").

As at September 30, 2024, ZAR113,646,610 (\$8.6 million) has been drawn under the GMSA Facility and ZAR41,357,659 (\$3.1 million) under the Menzi Facility.

#### ***Transaction Costs***

Raising fees of equal to 1% of the IDC Facility was paid to the IDC. Commitment fees of 0.5% per annum is payable on the undrawn amounts under the IDC Facility.

#### ***Interest Rate***

Interest accrues and is capitalized in ZAR on drawn amounts on a daily basis from the drawdown date at the South African Prime Rate (at September 30, 2024 - 11.5% on the drawdown date) plus 3% compounded monthly in arrears. The interest in the GMSA Facility will be capitalized to construction in progress and the interest on the Menzi Facility will be recorded in the statement of loss and comprehensive loss.

#### ***Conversion Options***

The IDC has an option to convert the outstanding loan amount and capitalized interest into the shares and shareholder loan of Thabatala Holding (Pty) Ltd ("**Project HoldCo**"), a wholly owned subsidiary of Giyani, at a 20% discount to the prevailing 30-day volume-weighted average price of the Company's shares in accordance with the terms of the IDC Facility. The IDC has a further option to convert Project HoldCo's shares at the 30-day volume-weighted average price and shareholder loan to the Company shares in accordance with the terms of the IDC Facility.

The maximum permissible shareholding percentage for IDC post-conversion is 19.9% in Project HoldCo's and Giyani's share capital, or such higher percentage as approved by Giyani's board and shareholders up to a maximum of 25%.

#### ***Maturity Date***

The IDC Facility matures on the last day of the fourth anniversary of the first drawdown date, i.e., April 23, 2028, for

the GMSA Facility and May 2, 2028, for the Menzi Facility.

### **Security**

Giyani has provided a guarantee on behalf of GMSA and Menzi in favour of the Lender guaranteeing the obligations under the IDC Facility.

### **Breach of Covenants**

As at September 30, 2024, there have been no instances of default of the covenants in the GMSA Facility and Menzi Facility. The principal drawn and interest accrued is payable at the maturity in the event that the IDC does not exercise its conversion option.

## **SHARE CAPITAL DATA**

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### **SHARE CAPITAL**

As of the date of this report, the Company had 274,313,330 common shares issued and outstanding, 12,366,667 stock options, 441,000 RSUs outstanding under its share-based incentive plans, and 54,835,235 warrants outstanding. If all outstanding stock options, RSUs and warrants were exercised, they would result in the issuance of 67,642,902 common shares.

### **STOCK OPTIONS**

On April 3, 2023, 3,000,000 stock options were granted to an officer and director of the Company in accordance with the Company's current Stock Option Plan ("**SOP**"). Each option is exercisable into one common share of the Company at a price of \$0.20 per common share for a period of five years from the date of grant. As of the date of this MD&A, only one-third of the options vested. The remaining two-thirds of the options, which were subject to vesting conditions requiring either an aggregate financing of \$35,000,000 or the Board approval of a positive FID to proceed with the K.Hill Project, were forfeited and cancelled. The following assumptions were used: share price \$0.20, dividend yield 0%; expected volatility (based on historical price data of the Company's common shares) 134%; risk-free interest rate – 2.94%; and an expected life of 5 years.

On January 26, 2024, the Company granted 1,500,000 stock options to non-executive directors of the Company in accordance with the Company's SOP, all of which vested immediately upon the grant date. Each option is exercisable into one common share of the Company at a price of \$0.115 per common share for a period of five years from the date of grant. The following assumptions were used: share price \$0.12, dividend yield 0%; expected volatility (based on historical price data of the Company's common shares) 127%; risk-free interest rate – 3.58%; and an expected life of 5 years.

On February 7, 2024, as provided in the Company's SOP with respect to Blackout Periods, 1,325,000 stock options held by then current consultants, officers and directors of the Company that were set to expire on September 28, 2023, expired following the Company's exit from Blackout Period.

On February 20, 2024, the Company granted 5,200,000 stock options to certain directors, officers, and management of the Company in accordance with the Company's SOP. Of the total, 1,850,000 stock options were granted to officers, 3,150,000 stock options were granted to management and 200,000 stock options were granted to directors of the Company's subsidiary company in Botswana. Each stock option is exercisable into one common share of the Company at a price of \$0.11 per common share for a period of five years from the date of grant. Stock options granted to directors vested immediately and one-third of the remaining 5,000,000 stock options vested immediately and the remaining one-third tranches to vest on each of the first and second anniversaries of the date of the grant. The following assumptions were used: share price \$0.13, dividend yield 0%; expected volatility (based on historical price data of the Company's common shares) 124%; risk-free interest rate – 3.58%; and an expected life of 5 years.

During the nine months ended September 30, 2024, the Company recognized stock-based compensation in connection with the vesting of options totaling \$413,143. \$(188,722) and \$286,252 were recorded in the interim consolidated statements of loss and comprehensive loss for Q3 and YTD 2024 (\$94,066 and \$263,374 in Q3 and YTD 2023). \$58,943 was capitalized to demonstration plant under construction (December 31, 2023 – Nil) and \$67,947 was capitalized to exploration and evaluation assets (December 31, 2023 – Nil).

2,100,001 stock options with exercise prices between \$0.165 and \$0.53 expired and 3,233,333 stock options with

exercise prices between \$0.10 and \$0.20 were forfeited.

The table below details the stock options outstanding as of November 22, 2024:

<b>Expiry date</b>	<b>Exercise price (\$)</b>	<b>Outstanding</b>	<b>Potential Liquidity \$</b>
January 14, 2025	0.110	166,667	18,333
February 13, 2025	0.11-0.20	1,333,333	236,667
March 31, 2025	0.11-0.33	366,667	95,333
May 24, 2025	0.115 to 0.48	3,675,000	783,625
July 05, 2025	0.150	375,000	56,250
September 24, 2025	0.185	400,000	74,000
April 21, 2026	0.530	875,000	463,750
September 02, 2026	0.480	650,000	312,000
April 01, 2027	0.330	225,000	74,250
June 17, 2027	0.360	300,000	108,000
January 26, 2029	0.115	650,000	74,750
February 20, 2029	0.110	3,350,000	368,500
		12,366,667	2,665,458

## WARRANTS

On February 20, 2024, the Company issued 54,835,235 share purchase warrants in conjunction with the ARCH Offering with an exercise price of \$0.225 per warrant and a five-year expiry date. Subject to the terms of the share purchase warrants, the expiry date can be accelerated if the Company's shares trade at a volume weighted average price above C\$0.31 for ten consecutive trading days. If the Company exercises its acceleration right, the expiry date of the share purchase warrants would be set to a date within 30 days of the date of the acceleration notice.

The share purchase warrants were assigned a fair value of \$2,857,515 determined using the Black-Scholes option pricing model using the following assumptions: share price \$0.13, dividend yield of 0%; expected volatility (based on historical price data of the Company's common share) of 124%; risk-free interest rate of 3.58%; and an expected life of five years.

The table below details the warrants outstanding as of the date of this report.

<b>Expiry date</b>	<b>Exercise price (\$)</b>	<b>Outstanding</b>	<b>Potential Liquidity \$</b>
February 20, 2029	0.225	54,835,235.00	12,337,928

## RSUS

On February 20, 2024, the Company granted 2,350,091 RSUs to an officer and to a consultant of the Company in accordance with the Company's Restricted Share Unit Plan ("**RSU Plan**"). Each RSU will vest into one share of the Company, or its cash equivalent, following the end of the vesting period. One-half of the RSUs vest on the first anniversary of the grant date and the balance on the second anniversary, subject to the terms of the RSU Plan.

On May 31, 2024, 1,909,091 RSUs were cancelled.

As of the date of this report there are 441,000 RSUs outstanding. Each RSU will vest into one share of the Company, or its cash equivalent, following the end of the vesting period. One-half of the outstanding RSUs will vest on February 20, 2025, and the balance on February 20, 2026, subject to the terms of the Company's RSU Plan.

## RELATED PARTY TRANSACTIONS

Key management personnel include those persons having authority and responsibility for planning, directing, and controlling the activities of the Company. The Company has determined that key management personnel consist of executive and non-executive members of the Board and corporate officers.

Related party transactions for three and nine months ended September 30, 2024 and September 30, 2023, are as follows:

Transaction type	Nature of relationship	For the three months ended		For the nine months ended	
		September 30	September 30	September 30	September 30
		2024	2023	2024	2023
Management fees	Officers	\$ 482,290	\$ 286,435	\$ 856,248	\$ 1,119,635
Director fees	Directors	86,516	89,831	166,236	254,985
Demonstration plant expenditure	Officer	36,900	-	202,500	-
Exploration and evaluation expenditures	Officer	18,612	5,742	474,202	54,622
Corporate, general and administrative expenses	Officer	34,071	-	97,080	-
Stock-based compensation	Directors and officers	(197,692)	112,677	130,017	269,700
Total		\$ 460,697	\$ 494,685	\$ 1,926,283	\$ 1,698,942

A summary of amounts due to related parties which is recorded in accounts payable and accrued liabilities is:

Transaction type	Nature of relationship	September 30	December 31
		2024	2023
Management fees and other	Officers	\$ 309,101	\$ 528,811

All transactions with related parties have occurred in the normal course of the Company's operations.

## COMMITMENTS AND CONTRACTUAL OBLIGATIONS

The Company has contracts in place with various service providers. However, there are no locked-in contractual minimums that would be required to be paid as all contracts are based on time and materials. These activities and the contractual obligations of the Company noted below are expected to be funded by the Company's current cash balance.

As at September 30, 2024, the Company had the following contractual obligations outstanding:

	Within one year	Two-five years	Total
Construction in progress	\$ 634,204	\$ -	\$ 634,204
Minimum lease payments	45,224	-	45,224
	\$ 679,428	\$ -	\$ 679,428

## SUBSEQUENT EVENTS

On November 13, 2024, Danny Keating resigned from the Board of Directors.

On November 15, 2024, Alex Azpitarte, Mark Burnett, Thuso Dikgaka, Charles FitzRoy and Stephanie Hart were appointed to the Board of Directors and the omnibus long-term incentive plan of the Company was approved, among other things, at the annual general and special meeting of shareholders.

750,000 stock options with an exercise price of \$0.15 expired on November 19, 2024.

## OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements.

## FINANCIAL INSTRUMENTS

The nature and extent of risks arising from the Company's financial instruments are summarized in note 20 of the Interim Financial Statements.

## MATERIAL ACCOUNTING POLICIES

The Company's Interim Financial Statements were prepared using the accounting policies and methods of application as disclosed in note 3 of the Company's annual audited financial statements.

## CHANGE IN ACCOUNTING POLICIES

For information on new standards and interpretations adopted and not yet adopted, refer to note 4 of the Interim Financial Statements.

## **CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES**

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The preparation of the Interim Financial Statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of income and expenses during the reporting period. Estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes may differ significantly from these estimates.

The significant estimates and judgments applied in the preparation of these Interim Financial Statements are consistent with those applied and disclosed in Note 2(f) to the Company's audited consolidated financial statements for the year ended December 31, 2023, except for as disclosed in the Company's Interim Financial Statements.

## **DISCLOSURE OF INTERNAL CONTROLS**

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Management has established processes to provide it with sufficient knowledge to support representations that it has exercised reasonable diligence to ensure that (i) the Interim Financial Statements do not contain any untrue statement of material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it is made, as of the date of and for the periods presented in the Interim Financial Statements, and (ii) the Interim Financial Statements fairly present in all material respects the financial condition, results of operations and cash flow of the Company, as of the date of and for the years presented.

In contrast to the certificate required for non-venture issuers under NI 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings ("NI 52-109"), the Venture Issuer Basic Certificate filed by the Company does not include representations relating to the establishment and maintenance of disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICFR"), as defined in NI 52-109. In particular, the certifying officers filing such certificate are not making any representations relating to the establishment and maintenance of controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized, and reported within the time periods specified in securities legislation; and a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Interim Financial Statements for external purposes in accordance with the issuer's generally accepted accounting principles (IFRS).

The Company's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in such certificate. Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost-effective basis DC&P and ICFR as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

## **TRENDS**

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Management regularly monitors economic conditions and estimates their impact on the Company's operations and incorporates these estimates in both short-term operating and longer-term strategic decisions. During the current period, governments and corporations have voiced support for policies and regulations in support of a transition to a low carbon economy. In addition, notable automobile manufacturers have announced their intention to incorporate manganese rich battery chemistries in their fleet of EVs. This strong endorsement has raised the profile of the Company and supported the Company's efforts to finance ongoing operating activities.

## **RISK AND UNCERTAINTIES**

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The information provided in this document is not intended to be a comprehensive review of all matters concerning the Company. The users of this information, including but not limited to investors and prospective investors, should read it,

in conjunction with all other disclosure documents provided including but not limited to all documents filed on SEDAR+ ([www.sedarplus.ca](http://www.sedarplus.ca)).

An investment in the securities of the Company is highly speculative and involves numerous and significant risks. Such investment should be undertaken only by investors whose financial resources are sufficient to enable them to assume these risks and who have no need for immediate liquidity in their investment. Prospective investors should carefully consider the risk factors that have affected, and which in the future are reasonably expected to affect, the Company and its financial position.

Furthermore, the results and financial condition of the Company are subject to a number of risks and uncertainties associated with its activities. Each of these risks could have a material adverse impact on the Company's future business, results of operations and financial condition, and could cause actual results to differ materially from those described in any forward-looking statements contained in this MD&A. The material risks and uncertainties, which should be considered in assessing the Company's activities are described under the heading "Risks and Uncertainties" in the Company's most recent AIF for the year ended December 31, 2023, which are incorporated by reference in this MD&A. The AIF is filed on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca) and on the Company's website at [giyanimetals.com](http://giyanimetals.com). Any one or more of these risks and uncertainties could have a material adverse effect on the Company.

The material factors or assumptions that the Company has identified and were applied by it in drawing conclusions or making forecasts or projections set out in the forward-looking information include, but are not limited to:

- there can be no assurance that the Company will not experience similar logistical and administrative delays in the future due to COVID-19 or a similar public health threat and government actions or regulations in response thereto. An outbreak of infectious disease, a pandemic or a similar public health threat, such as the COVID-19 outbreak, or a fear of any of the foregoing, could adversely impact the Company by causing operating, supply chain and project development delays and disruptions, and increased costs to the Company. Further, such pandemics and diseases represent a serious threat to maintaining a skilled workforce in the mining industry and are a major health-care challenge for the Company. There can be no assurance that the Company's personnel will not be impacted by these pandemic diseases and related travel restrictions and the Company may ultimately see its workforce productivity reduced or incur increased medical costs / insurance premiums because of these health risks. Furthermore, the Company's operations and activities may be suspended or restricted due to government mandated actions;
- the Company has no history of production. There can be no assurance that the Company's development and operation of the Demo Plant will be successful in verifying that the Company can profitably produce HPMSM to a specification that meets the requirements of potential offtake partners and customers. Nor can there be any assurance that the Company will successfully establish mining operations or profitably produce from the K.Hill Project or any other project;
- there can be no assurance that Giyani will be successful in obtaining the capital required to continue its business operations and/or to maintain its property interests, or that such financing will be sufficient to meet the Company's objectives or obtained on terms favorable to the Company;
- the business of developing and exploring resource properties involves a high degree of risk and, therefore, there is no assurance that current exploration and development programs will result in profitable operations;
- there is no guarantee that the supply and demand for materials that the Company intends to produce for sale will remain as forecast;
- there is no guarantee that the Company will receive all requisite licences and permits required to operate the K.Hill Project;
- there is no guarantee that title to one or more licences or rights at Giyani's projects will not be challenged or impugned;
- there is no guarantee that the Company will comply with applicable laws, regulations and permitting requirements that may result in enforcement actions;
- the Company is dependent on the services of key management as well as on the services provided by its expertise of its consulting engineers, exploration geologists, geophysicists, among others. There is no assurance that the Company can retain the talent;

- there is no assurance that any future changes in environmental regulation will not adversely affect the Company's operations;
- the Company's inability to compete with other companies could have a material adverse effect on its business, financial condition, results of operations, cash flows or prospects;
- the execution of the Company's business and growth strategies, including the success of the Company's strategic investments and initiatives;
- successful completion of projects on budget and on schedule;
- anticipated metal prices, foreign exchange rates and production;
- the supply and availability of all forms of energy and fuels at reasonable prices;
- changes in technology or other developments could result in preferences for substitute products;
- maintaining good relations with the communities in which the Company operates, including local governments;
- the economies and political systems of Botswana and South Africa should be considered by investors to be less predictable than those in countries in which the majority of investors are likely to be resident; and
- no significant and continuing adverse changes in general economic conditions or conditions in the financial markets (including commodity prices and foreign exchange rates).

#### **CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

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This MD&A contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as "forward-looking statements"). These statements relate to future events or the Company's future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates" or "believes", or variations of, or the negatives of, such words and phrases, or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from those anticipated in such forward-looking statements. The forward-looking statements in this MD&A speak only as of the date of this MD&A or as of the date specified in such statement.

In making such forward-looking statements, the Company has made assumptions regarding, among other things: the accuracy of the estimation of mineral resources; that exploration activities and studies will provide results that support anticipated development and extraction activities; that studies of estimated mine life and production rates at the K.Hill Project will provide results that support anticipated development and extraction activities; that the Company will be able to obtain additional financing on satisfactory terms; that infrastructure which may be developed or operated by third parties, will be developed and/or operated as currently anticipated; that laws, rules and regulations are fairly and impartially observed and enforced; that the market prices for relevant commodities remain at levels that justify development and/or operation; that the Company will be able to successfully acquire land access with holders of surface rights; and that war, civil strife, and/or insurrection and/or public health crises, including events like the COVID-19 pandemic, do not impact the Company's exploration activities or development plans.

Inherent in forward-looking statements are risks, uncertainties and other factors beyond the Company's ability to predict or control. For a comprehensive discussion on the risks and uncertainties the reader is directed to the Company's AIF and MD&A for the year ended December 31, 2023, which are filed on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca) and the Company's website at [giyanimetals.com](http://giyanimetals.com). Actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking statements contained in this MD&A.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any of its future results, performance or achievements expressed or implied by forward-looking statements. All forward-looking statements herein are qualified by this cautionary statement. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements whether as a result of new information or future events or otherwise, except as may be required by law. If

the Company does update one or more forward-looking statements, no inference should be drawn that it will make additional updates with respect to those or other forward-looking statements, unless required by law.

Certain significant forward-looking statements included in this MD&A include, but are not limited to, statements with respect to:

- the construction, commissioning and operation of the Demo Plant and the Company's ability to produce HPMSM product samples that meet the product spec and acceptance of potential off-takers;
- the MD&A also contains references to estimates of Mineral Resources (as such term is defined in NI 43-101). The estimation of Mineral Resources is inherently uncertain and involves subjective judgments about many relevant factors. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The accuracy of any such estimates is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation (including estimated future production from the Company's projects, the anticipated tonnages and grades that will be mined and the estimated level of recovery that will be realized), which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that ultimately may prove to be inaccurate. Mineral Resource estimates may have to be re-estimated based on: (i) fluctuations in manganese or other mineral prices; (ii) results of drilling, (iii) metallurgical testing and other studies; (iv) proposed mining operations, including dilution; (v) the evaluation of mine plans subsequent to the date of any estimates; and (vi) the possible failure to receive required permits, approvals and licences;
- the quantity of MRE including any upgrading or extensions thereof, or any conversion of Mineral Resources to Mineral Reserves and the nature and timing of any proposed updated MRE;
- there can be no assurance that changes in government policies in Canada, Botswana, South Africa and other jurisdictions will not adversely affect the Company's business, financial condition, and results of operations. In particular, tax codes, agreements and legislation are subject to continuous change, and any changes may have a material effect on the Company's business, financial condition, results of operations and prospects;
- there is inherent uncertainty in the economic projections outlined in the Company's technical reports, including the 2021 and 2023 PEAs and the Feasibility Study. Although these reports are based on the best available information, actual costs may significantly exceed estimates. Despite incorporating a contingency factor to address this uncertainty, there is no assurance that it will be adequate. The economic viability of a mineral deposit is influenced by various factors such as the accuracy of Mineral Reserve and Resource estimates, metallurgical recovery rates, capital and operating costs, and future metal prices. Additionally, these estimates can be materially affected by metallurgical, environmental, permitting, legal, socio-economic, marketing, political, and other factors;
- the ability to realize the MRE and the Company's expectations that the K.Hill Project will meet the projections of any PEA, any feasibility study, or any other form of mining, beneficiation and economic analysis;
- the Company has no history of manganese production, and there can be no assurance of successfully establishing mining operations or profitably producing HPMSM from the K.Hill Project or any other project;
- the future development and profitability of Giyani's mineral properties depend on the prices of manganese and battery-grade manganese materials. Given the historical volatility of commodity prices, future declines could make the development or commercial production of Giyani's properties impractical or uneconomical. This uncertainty may lead the Company to determine that commencing commercial production is not economically feasible, potentially resulting in the curtailment or suspension of some or all development and exploration activities, adversely impacting Giyani's financial performance and operational results;
- Giyani is exposed to cyber risk due to increased digital transformation and reliance on new operational technology, making the Company vulnerable to data breaches. There is no assurance that these risks from current or future vulnerabilities in Giyani's information technology systems will not adversely impact its operational results and financial condition. Potential consequences include lost revenue from breach costs, legal expenditures, regulatory fines, incident investigations, assessments, audits, communication management expenses, victim and authority notifications, and reputational damage following a data breach;
- the receipt and maintenance of all necessary licences, permits and approvals;

- successful execution of the Company's exploration and development plans for its Kanye Basin Prospects;
- expectations regarding to the Company's funding needs on a going-forward basis and the ability to fund its cash requirements for the next 12 months;
- the Company's ability to benefit from the combination of growth opportunities and the ability to grow through the capital markets;
- treatment under the governmental regulatory and environmental regimes in which it operates; and
- the performance and characteristics of the Company's mineral properties.