Giyani Corporate Update: Demonstration Plant Commissioning Progress Continues

14.11.2024 | GlobeNewswire

TORONTO, Nov. 14, 2024 - Giyani Metals Corp. (TSXV:EMM, GR:A2DUU8) ("Giyani" or the "Company"), developer of the K.Hill Battery-Grade Manganese Project in Botswana ("K.Hill" or "the Project"), is pleased to provide an update on the commissioning of the Demonstration Plant ("Demo Plant"). See update video here (link: https://youtu.be/acXeQR-Vmil) with CEO, Charles FitzRoy, Group Process Engineer, Justin Taylor, and Lead Process Engineer, Desiree Mayer.

Highlights:

- The Demo Plant in Johannesburg is progressing efficiently through the commissioning phase. Progress since the last report (see October 22, 2024 news release) includes the completion of dry commissioning (C2) for the majority of systems, including the complex crystalliser, and progression through wet commissioning (C3).
- The Demo Plant remains on track for production of battery-grade manganese (HPMSM) before year-end. HPMSM produced from the Demo Plant will be provided to offtaker qualification.
- The continuous process flow capability of the Demo Plant is a significant advantage, as it allows the team to operate the facility at steady state, enabling production of consistent specification battery-grade manganese (HPMSM), a key requirement for potential offtake partners.
- Installation of the ISO-certified, independent laboratory is near-complete, a key component for offtake testing. The onsite lab forms another key part of the Demo Plant's ability to produce a consistent specification product, as it enables the team to continually test and adjust if necessary to ensure Giyani's HPMSM meets the strict criteria of the OEM's high-purity battery-grade manganese requirements.
- As the Demo Plant is a smaller scale, direct copy of the proposed Commercial Plant (to be built in Botswana), this significantly derisks the project as Giyani will better understand how the Commercial Plant will respond in advance of construction, commissioning, and ramp-up of that facility, which is planned for 2027. The Commercial Plant will be constructed adjacent to Giyani's extensive 100% owned manganese oxide ore sources in Southern Botswana.
- The Demo Plant enables final optimisation of the engineering design and flowsheet in order to reduce operating costs and carbon profiles, in parallel with the Definitive Feasibility Study ("DFS") which is underway and expected to be completed in 2025.

Charles FitzRoy, President and CEO of the Company, commented:

"Giyani's Demo Plant is firmly in the commissioning phase, and on target to deliver first production of battery-grade manganese before year-end. The Demo Plant's production capacity establishes a strong foundation for Giyani to engage with potential offtake partners: and offers Giyani many advantages that would not be available with a smaller or non-continuous facility. The continuous process flow of the Demo Plant will allow the team to target steady-state operations over extended periods, consequently proving Giyani's ability to produce consistent battery-grade manganese and satisfy offtake requirements. This continuous operation at pre-commercial scale also provides critical information for understanding how the Commercial Plant will respond, significantly de-risking the Project.

We were proud to host our partners the Industrial Development Corporation of South Africa ("IDC") at the Demo Plant to showcase the progress we have made with the support of the IDC's US\$16M facility and we look forward to continuing to strengthen our relationship.

The results from the Demo Plant will ultimately yield significant strategic and operational benefits, and is a crucial step in the Company's mission to become a dominant producer of high-purity battery-grade manganese for the EV battery market. We look forward to providing further updates in due course."

Figure 1: Demo Plant Overview Looking South

28.12.2025 Seite 1/5

Demo Plant Construction Update

The Demo Plant, consisting of nine Process Modules (each a self-contained process system within a fixed frame), is largely at the status of Construction Complete, and the bulk of the plant has been handed over to the commissioning crews. A few later delivery items are due for delivery and installation shortly.

Progress since the last report in October includes the completion of C2 commissioning, and progression through C3 commissioning.

The exciting process of C3 commissioning has now commenced. The C3 stage can be undertaken at an individual Process Module level, ensuring a systematic approach Commissioning of the full process flow (C4 & C5) will commence once all the individual Process Modules are C3 Complete.

Figure 2: Valve Open/Closed Testing During C2 Commissioning

Stages of commissioning:

- C1 Full mechanical completion (individual Process Modules)
- C2 Dry testing, direction testing, loop testing (individual Process Modules)
- C3 Cold/Water Commissioning, software testing (individual Process Modules)
- C4 Hot Commissioning with reagents and steam (full Process)
- C5 Production Ramp-up (full Process)

The commissioning process is being led by Desiree Meyer, Giyani's Lead Process Engineer. Desiree has extensive experience in commissioning hydrometallurgical facilities across Africa and she will lead the Minopex operations team in these efforts. By working through commissioning, Minopex will rapidly develop its familiarity with the facility, making Demo Plant production operations safer and more efficient.

Figure 3: Demo Plant Render

In addition to progress at the Demo Plant, concurrent metallurgical test-work is underway to further optimize the flowsheet. Giyani is focussed on further reducing reagent use and improving both the operating cost and carbon profiles for the Commercial Plant, planned for construction adjacent to Giyani's extensive 100% owned manganese oxide ore sources in Southern Botswana.

Figure 4: Onsite Independent Lab

The Demo Plant is designed at a scale factor of approximately 1:10 to the planned Commercial Plant. This provides robust and reliable scale-up from the Demo Plant data when the Commercial Plant is implemented. To illustrate, the leach tanks have a 60cm diameter in the Demo Plant and this is expected to be 8-10x larger at approximately 5m in the Commercial Plant.

Within the Demo Plant, the following progress has been made since the last Demo Plant update in October:

- Commissioning is firmly underway and the Demo Plant is moving through the C3 phase currently.
- The modifications to the laboratory room are complete, and most of the laboratory equipment has been installed.

Figure 5: Onsite Independent Lab Preparation Area

Demo Plant Operational Overview

Giyani is continuing with software finalisation on the Yokogawa DCS software that will be used to operate

28.12.2025 Seite 2/5

Giyani's fully continuous Demo Plant. The ability to continuously operate at this pre-commercial scale will allow Giyani to understand how the Commercial Plant will respond ahead of construction, minimizing issues that could arise during ramp-up and operations. Unlike a lab- or pilot-scale operation, a full, industrial control system is required to operate this large-scale, automated, hydrometallurgical plant.

The development of all process standard operating procedures ("SOPs") is complete and Minopex are reviewing and refining these procedures to ISO International Standards. As the Demo Plant is a direct copy of the anticipated Commercial Plant, albeit at a 1:10 scale, the overall operating requirements and system requirements are very similar. Alongside the engineering, commercial and research benefits of the Demo Plant, the development of SOPs will facilitate a smooth transition to full-scale production.

The independent, fully ISO-certified laboratory will allow commercial-level metal accounting and provide rapid assay turnaround times to enable effective operation of the Demo Plant. The laboratory equipment, which includes ICP-OES and XRF machines, has been delivered to site and most of it has been installed. Sensitive equipment will be installed at the final stages of commissioning to protect it.

Other Matters

The Company also announces that Danny Keating has resigned from the board of directors, effective November 13, 2024. Mr. Keating is not on the slate of directors to be elected at the upcoming annual general and special meeting of shareholders to be held on November 15, 2024.

About Giyani

Giyani is focussed on becoming the dominant western-world producer of sustainable, low carbon high purity battery grade manganese for the electric vehicle ("EV") industry. The Company has developed a proprietary hydrometallurgical process to produce battery grade manganese (HPMSM), a lithium-ion battery cathode precursor material critical for EVs.

The Company has secured financing of US\$26m from two strategic partners, ARCH Sustainable Resources Fund LP and the Industrial Development Corporation of South Africa, enabling it to progress the K.Hill battery-grade manganese project in Botswana to construction by building and operating the Demo Plant and completing a Definitive Feasibility Study in 2025.

Additional information and corporate documents may be found on www.sedarplus.ca and on Giyani Metals Corp. website at https://giyanimetals.com/.

About Minopex

Minopex is a global leader in plant operations and maintenance, employing over 2,000 personnel across different operations. With nearly three decades of experience, Minopex has collectively operated some 50 different processing facilities as well as having commissioned and ramped-up over 90 globally, establishing itself as a leader in a variety of minerals processing technologies. For more information about Minopex, visit: www.minopex.com.

Qualified Persons / NI 43-101 Disclosures

A National Instrument 43-101 ("NI 43-101") technical report including results of the PEA and the MRE can be found on SEDAR+ at www.sedarplus.ca and made available on the Company's website at https://giyanimetals.com/.

Justin Taylor CEng FIMMM QMR BSc Eng (Chem) is a qualified person, as defined by NI 43-101. Mr. Taylor is the Company's Group Process Engineer and has reviewed and approved the scientific and technical content contained in this news release but is not independent for the purposes of NI 43-101.

28.12.2025 Seite 3/5

On behalf of Giyani Metals Corp.

Charles FitzRoy, President and CEO

Contact:

Giyani Metals Corp. cfitzroy@giyanimetals.com

Charles FitzRoy, President & CEO Tel: +1289-291-7632

Tavistock, Financial PR giyani@tavistock.co.uk
Tara Vivian-Neal +44 20 7920 3150

Neither the TSX Venture Exchange (the "TSXV") nor its Regulation Services Provider (as that term is defined in the policies of the TSXV) accepts responsibility for the adequacy or accuracy of this news release.

The securities described herein have not been registered under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), or any state securities laws, and accordingly, may not be offered or sold to, or for the account or benefit of, persons in the United States or "U.S. persons," as such term is defined in Regulation S promulgated under the U.S. Securities Act ("U.S. Persons"), except in compliance with the registration requirements of the U.S. Securities Act and applicable state securities requirements or pursuant to exemptions therefrom. This news release does not constitute an offer to sell or a solicitation of an offer to buy any of the Company's securities to, or for the account of benefit of, persons in the United States or U.S. Persons.

Forward Looking Information

This news release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. All statements in this news release, other than statements of historical fact, that address events or developments that Giyani expects to occur, are "forward-looking statements". Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "does not expect", "plans", "anticipates", "does not anticipate", "believes", "intends", "estimates", "projects", "potential", "scheduled", "forecast", "budget" and similar expressions, or that events or conditions "will", "would", "may", "could", "should" or "might" occur.

Such statements include without limitation: the Company the ongoing construction, commissioning and operation of the Demo Plant, and timing thereof, completion and timing of the DFS or at all.

All such forward-looking statements are based on the opinions and estimates of the relevant management as of the date such statements are made and are subject to certain assumptions, important risk factors and uncertainties, many of which are beyond Giyani's ability to control or predict. Forward-looking statements are necessarily based on estimates and assumptions that are inherently subject to known and unknown risks, uncertainties and other factors that may cause actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking statements. In the case of Giyani, these facts include anticipated operations in future periods, planned construction and development of its properties and facilities, and plans related to its business and other matters that may occur in the future. This information relates to analyses and other information that is based on expectations of future performance and planned work programs.

Forward-looking information is subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking information, including, without limitation: inherent exploration hazards and risks; risks related to exploration and development of natural resource properties; uncertainty in Giyani's ability to obtain funding; commodity price fluctuations; recent market events and conditions; risks related to governmental regulations; risks related to obtaining necessary licences and permits; risks related to Giyani's business being subject to environmental laws and regulations; risks related to the Company's mineral properties being subject to prior unregistered agreements, transfers, or claims and other defects in title; risks relating to competition from larger companies with greater financial and technical resources; risks relating to the inability to meet financial obligations under agreements to which they are a party; ability to recruit and retain qualified personnel; and risks related to the Company's directors and officers becoming associated with other natural

28.12.2025 Seite 4/5

resource companies which may give rise to conflicts of interests. This list is not exhaustive of the factors that may affect Giyani's forward-looking information. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in the forward-looking information or statements.

Giyani's forward-looking information is based on the reasonable beliefs, expectations and opinions of the Company's respective management on the date the statements are made, and Giyani does not assume any obligation to update forward looking information if circumstances or management's beliefs, expectations or opinions change, except as required by law. For the reasons set forth above, investors should not place undue reliance on forward-looking information. For a complete discussion with respect to Giyani and risks associated with forward-looking information and forward-looking statements, please refer to Giyani's continuous disclosure documents which are filed on SEDAR+ at www.sedarplus.ca.

Photos accompanying this announcement are available at: https://www.globenewswire.com/NewsRoom/AttachmentNg/ffb6eb2b-7b1b-405d-8fb4-2c03d274aa6b

https://www.globenewswire.com/NewsRoom/AttachmentNg/52c50a86-5a69-40d2-9a01-e73028db0498

https://www.globenewswire.com/NewsRoom/AttachmentNg/e53bfcc9-023a-4388-acac-1c4438ddd51a

https://www.globenewswire.com/NewsRoom/AttachmentNg/d89810bb-c7d6-4c85-a4f5-fb33f40d9a38

https://www.globenewswire.com/NewsRoom/AttachmentNg/188e8035-181a-4630-afbd-f6af3088d643

Dieser Artikel stammt von GoldSeiten.de Die URL für diesen Artikel lautet:

https://www.goldseiten.de/artikel/638127--Giyani-Corporate-Update--Demonstration-Plant-Commissioning-Progress-Continues.html

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere AGB/Disclaimer!

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt! Alle Angaben ohne Gewähr! Copyright © by GoldSeiten.de 1999-2025. Es gelten unsere <u>AGB</u> und <u>Datenschutzrichtlinen</u>.

28.12.2025 Seite 5/5