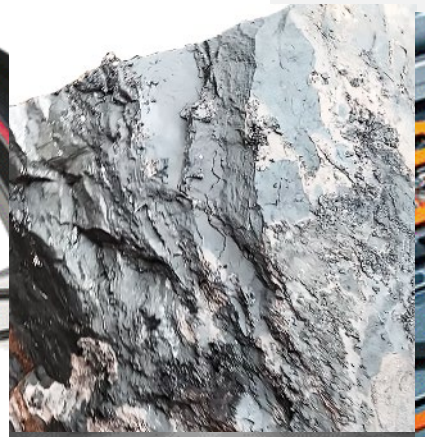
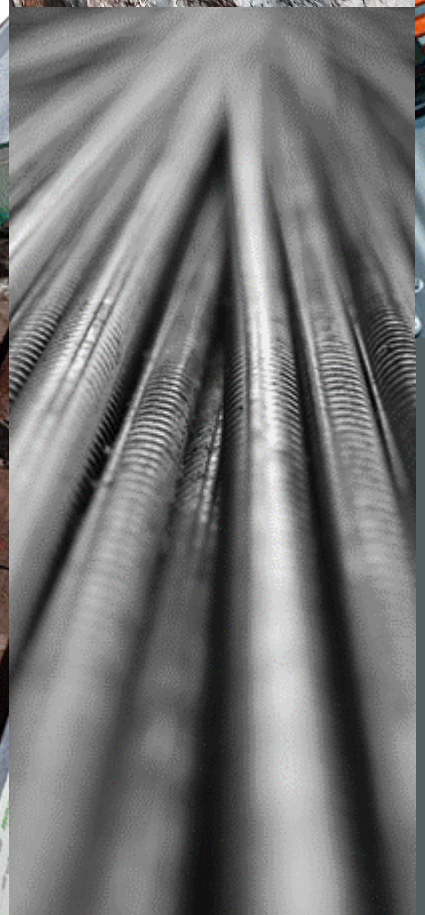




GIYANI METALS CORP.

# DEVELOPING BATTERY GRADE MANGANESE FOR THE EV MARKET

## BUILDING A GLOBAL BATTERY METALS PLAYER

JUNE 2022

giyanimetals.com

# CAUTIONARY NOTE – FORWARD LOOKING STATEMENTS

This presentation 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 presentation speak only as of the date of this presentation or as of the date specified in such statement.

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, 2020, which are filed on SEDAR at and the Company’s website at giyanimetals.com. Actual results and developments are likely to differ, and may differ materially, fromthose expressed or implied by the forward-looking statements contained in this presentation.

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.

**Qualified Persons**

The scientific, technical, and economic information contained in this presentation relating to the K.Hill Manganese Project are based upon a technical report prepared by Mr. Michael John Beare BEng, CEng, MIOM3 and Mr. Peter Gleeson MSc, CEng., MIOM3,, AIGS both of SRK Consulting entitled “Kgwakgwe Hill Manganese Project Independent Technical Report” having an effective date of March 2022 (the “NI-43-101 Technical Report”). The NI-43-101 Technical Report was filed on SEDAR at www.sedar.com on March 30, 2022. Mr. Beare and Mr. Gleeson are "Qualified Persons" under NI 43-101 and have each consented to the inclusion in this presentation of such scientific, technical, and economic information. Mr. Beare and Mr. Gleeson are "independent" within the meaning of NI 43-101.

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

# AN AFRICAN BATTERY-GRADE MANGANESE OPPORTUNITY SERVING THE GLOBAL EV MARKET

## A premium, sustainable supply of battery materials

Developing the K.Hill high-purity manganese sulphate monohydrate (HPMSM) project in Botswana

HPMSM is a critical component in lithium-ion battery cathodes

90% of HPMSM supply currently comes from China – only one producer ex-China manufacturing HPMSM from ore

Global battery demand is forecast to grow 1,400% by 2030 and HPMSM content per battery is forecast to rise 85%

## Tier One mining jurisdiction

Botswana is the longest serving democracy in Africa

Ranked the most attractive mining jurisdiction in Africa (Fraser Institute, 2020)

Well-established mining industry with investor friendly frameworks for exploration, development and operations

Strong fiscal advantages, including 3% royalty and deduction of 100% of the mining capex

## Strong project fundamentals

April 2021 PEA 80% IRR and CAD442M post tax NPV10 with start-up capex of CAD159M

Feasibility study to be completed in Q3 2022

Experienced management and board with a track record of successful project delivery

Dispatch of first product from demonstration plant scheduled in 2023

## ESG at the core of project development

Environmental impact at the centre of project design with renewable energy integration, electric mining fleet and dry stack tailings

Strong relationship with local community and government of Botswana

Member of the Critical Minerals Association and European Battery Alliance

# STRONG LEADERSHIP WITH PROJECT DEVELOPMENT EXPERIENCE

## Senior Management

**Robin Birchall**
CEO & Director

**Derk Hartman**
President & COO

**Eugene Lee**
CFO

**George Donne**
VP Business Development

**Dirk Geerligs**
VP Project Development & Construction

**Jacques du Toit**
VP Technical Services

**Marion Thomas**
VP ESG

**Luhann Theron**
Senior Geologist

## Independent board

**Jonathan Henry**
Non-executive Chair

**Stephanie Hart**
Non-executive Director

**John Petersen**
Non-executive Director

**Thuso Digkaka**
Non-executive Director,
Chair of Menzi Battery Metals

**Michael Jones**
Non-executive Director

## Mine Development Experience

BHP
VALE
HUDBAY
SILVER BEAR
DEBSWANA

## Project Finance Expertise

cg Canaccord Genuity
J.P.Morgan
GREENSTONE RESOURCES
ABN·AMRO
BMO Capital Markets

## Project Engineering Experience

HATCH
IHC
coffey
A TETRA TECH COMPANY
PATERSON & COOKE

# WE ARE COMMITTED TO SUSTAINABILITY

- Giyani is committed to conducting its business in a manner that is ethical, sustainable and beneficial to all stakeholders
- Giyani's goal is to be a low carbon company, with initiatives including:
  - Renewable energy integration (solar power) into power mix
  - Electrification of mining and transport fleet
- Aligned to the Equator Principles for sustainable development and is a member of the Critical Minerals Association and European Battery Alliance
- The Board has oversight and accountability for governance and maintaining ethical culture

Support for Botswana Council for Disabled (December 2021)

# EV BATTERY METALS SUPPLY CHAIN

## RAW MATERIALS

Mineral ores are mined and processed into battery-grade salts e.g. HPMSM, lithium hydroxide

## PROCESSED BATTERY MATERIALS

These metal salts are combined into precursor materials

These materials are processed into battery components e.g. cathodes

## BATTERY PACKS

Cathodes, anodes and other components combined into battery cell

Cells assembled into battery packs by battery companies

## EVS

Completed battery packs inserted into of EV by car manufacturer in the assembly process

1. HPMSM from the demonstration plant are sent to battery or cathode active material manufacturers for quality testing
2. Battery companies will test product in cathode and then cell
3. OEMs will test cell performance and undertake sustainability checks on supply chain

Giyani HPMSM produced in testwork

# OPPORTUNITY TO FEED A GROWING BATTERY MARKET

- Our sustainable HPMSM product will be sold to a wide range of consumers who seek traceable, responsible supply of critical raw materials
- Giyani have open dialogue with many of the leading CAM, cathode and cell producers, and OEMS

## CAM / Cathode producers

BASF We create chemistry
umicore
SUMITOMO
HALDOR TOPSOE
LG Chem
SHOWA DENKO
EcoPro

## Cell Producers

CATL
Panasonic
SVOLT Driven by Innovation
northvolt
VERKOR
ACC AUTOMOTIVE CELLS Co
SAMSUNG SDI
BRITISHVOLT

## OEMs

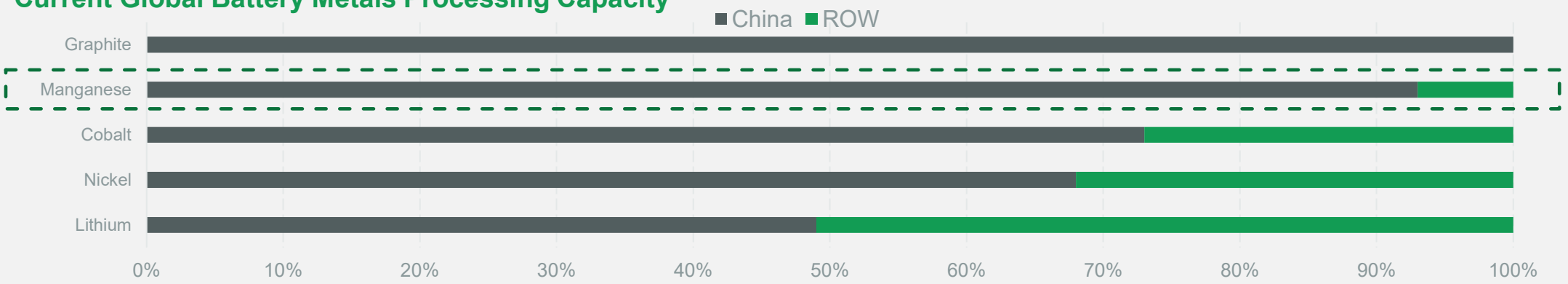
TESLA
GM
VOLVO
JAGUAR
LAND ROVER
Mercedes-Benz
STELLANTIS
RENAULT NISSAN MITSUBISHI

# Why does HPMSM matter

# MANGANESE IS A CRITICAL BATTERY METAL AND CHINA DOMINATES GLOBAL PROCESSING

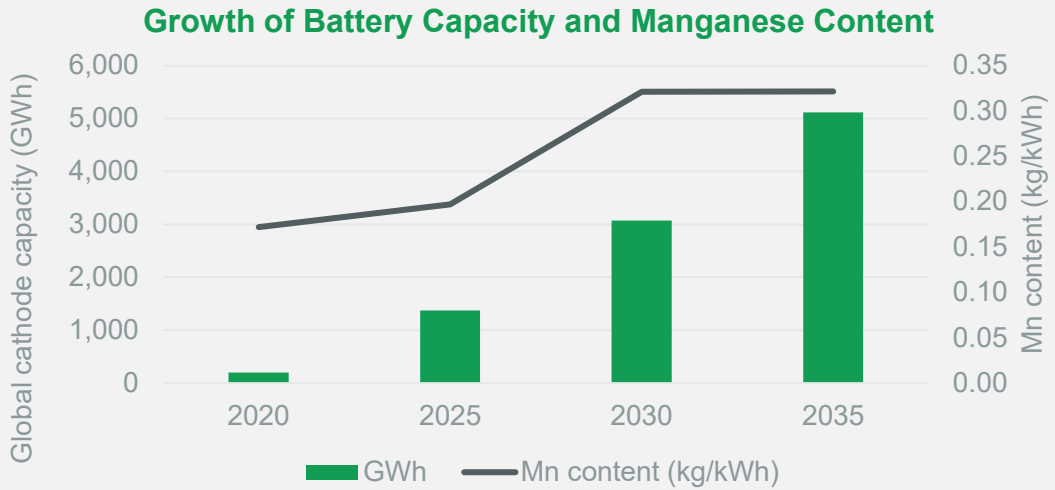
- Whilst manganese is one for the most traded commodities globally, only 0.5% of its total supply is suitable for the battery market
- Manganese, in the form of HPMSM, is a key material used in most EV battery cathodes and stabilises the nickel content at a fraction of the cost of cobalt .
- Currently only **one** company produces HPMSM outside of China and K.Hill will be only second project ex-China to produce HPMSM directly from ore
- Non-Chinese sources of HPMSM are likely to be prioritized by end-users to mitigate supply chain risk

## Current Global Battery Metals Processing Capacity



# FUTURE POINTS TO MANGANESE-RICH BATTERIES

- Manganese is expected to be a key commodity is reducing the per unit cost of EV batteries as producers look to reduce high cost materials such as Cobalt
- As such, the highest growth battery cathode segment = NMC (nickel + manganese + cobalt)
- Price and sustainability are driving end-users towards manganese-rich formulations e.g. NMC-370 (BASF); NMx (SVolt)



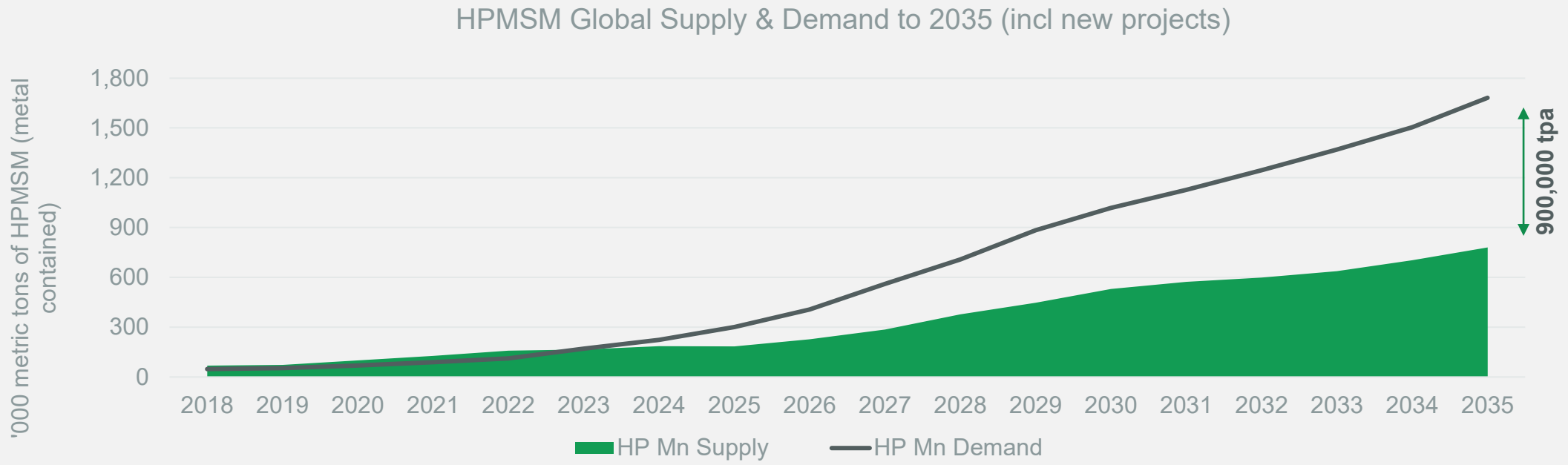

**"I think there's an interesting potential for manganese"** Elon Musk (Tesla), March 2022

**"High-manganese cathodes are considered one of the strongest candidates for the next generation of lithium-ion batteries because of their cost advantage, cobalt-free nature, and strong electrochemical performance,"** Roskill, March 2022.



Source: CPM Group

# A SIGNIFICANT HPMSM SUPPLY DEFICIT IS APPROACHING




- As global battery demand is forecast to grow 1,400% by 2030, manganese content per battery is forecast to rise 85%
- Demand is significantly outstripping supply, inclusive of projects in development.
- Once in production, Giyani will produce c.20% of global demand to provide a traceable, responsible supply of HPMSM to the global market

# Our Assets

# CLEAR ESG COMMITMENTS TO DEVELOP A RESPONSIBLE OPERATION

## Environmental sustainability

Developing rehabilitation and closure plans from the outset to address key legacy issues

Incorporating trade-off studies to reduce the impact across our operation, including tailing management and carbon footprint

Implementing energy saving initiatives

Optimisation of  water usage and managing water quality

Low negative impact operation aim at mitigating environmental risk

## Social inclusion and development

Employment policies to prioritise to local people once the project is commissioned

Support the further education and training of our employees

Installing international standard health and safety programmes striving to strive to achieve zero harm.

The respect of cultural norms of the local communities and host countries in which the Company operates

## Economic development of local regions

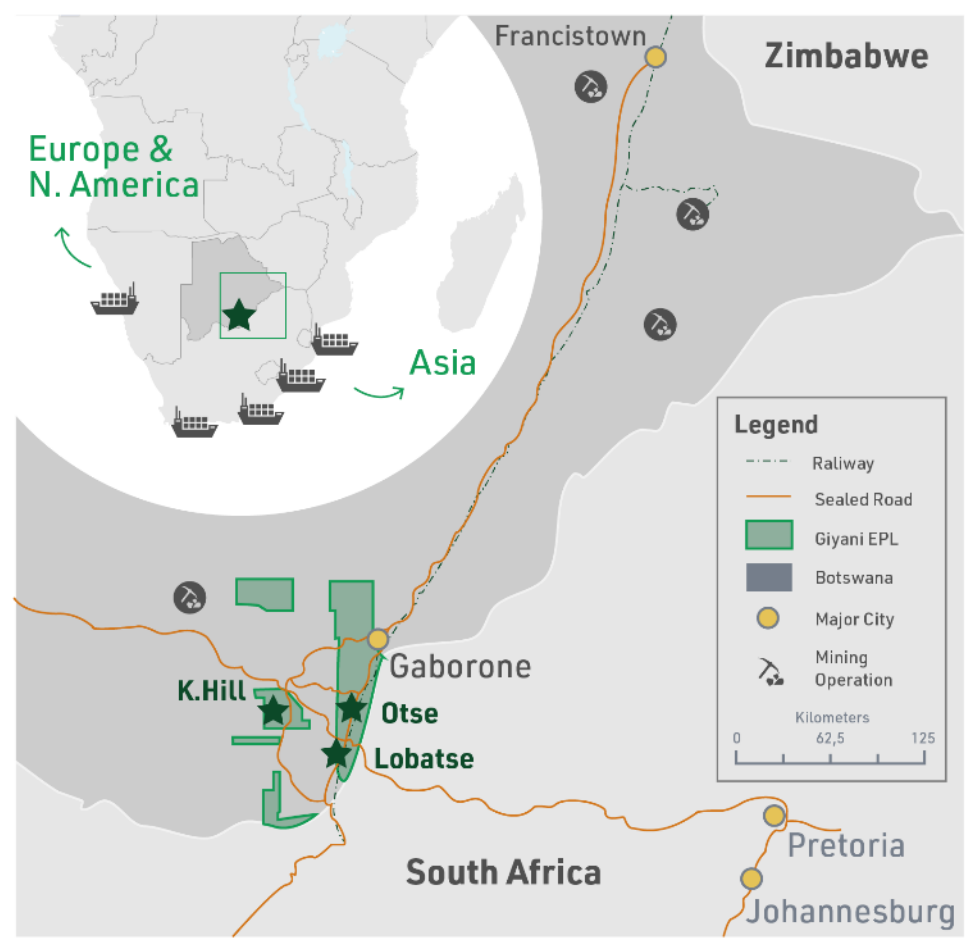
Implementation of community development plans to facilitate socio-economic development and upliftment

Adopting a local procurement policies

Potential for long-term operation with strong socio-economic impact

Generation of jobs for local and national workforce

# ATTRACTIVE ASSET BASE IN PIVOTAL LOCATION




## Projects

- Three previously producing battery-grade manganese oxide prospects
  - **K.Hill:** historic mine outside small town of Kanye
  - **Otse:** 2km from A1 highway and 50 km from K.Hill
  - **Lobatse:** 1 km from the RSA border and 50 km from K.Hill
- Ore from all three deposits could feed a central production facility

## Supportive existing Infrastructure

- Proximate to major population centres with reliable power, water and medical facilities.
- Excellent rail and road connections to five seaports in three countries shipping to Asia, EU and US


Visualised pit at K.Hill


Substation close to K.Hill


A1 highway to Otse

# K.HILL OPERATION

- PEA demonstrated an eight year mine life, producing 891,000 tonnes of HPMSM with significant upside.
- Operation hold significant opportunity to increase the size of the mine with the initial 1.7Mt Resource already increased to 2.1mt with a further 3.1Mt of indicated Resources
- Shallow traditional truck and shovel open pit
- Straight-forward onsite processing.
- Plant is designed to act as a central processing hub for our surrounding nearby project
- Metallurgical test work showed HPMSM with less than 1% total impurity and manganese content of more than 31.5% has been achieved
- Feasibility study underway and expected Q3 2022

# LOW IMPACT MINING

## Easy mining
- Friable, low impurity ore amenable to free dig mining
- Low profile open pit reduces impact on local environment

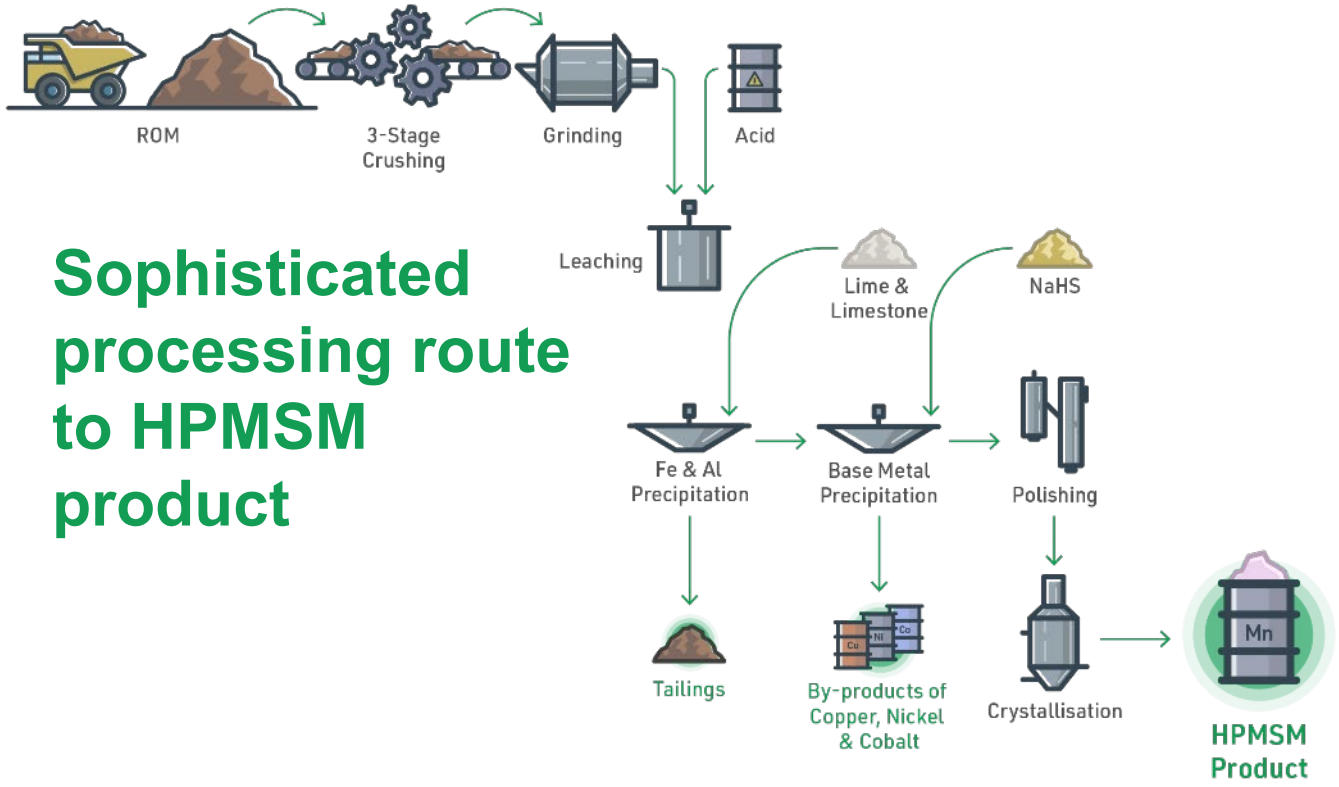
## Low carbon
- MnO ore requires no calcining so hydromet process direct from ore to HPMSM
- LCCA results in Q3 2022

## Renewable energy integration
- Studies undertaken for integration of up to 4.5MWdc of solar power a K.Hill
- Potential option to transition to an independent power producer

## Dry stack tailings
- Safe storage of non-toxic waste products
- De-risk waste management

# DE-RISKING PRODUCTION THROUGH DEMONSTRATION PLANT

## Sophisticated processing route to HPMSM product



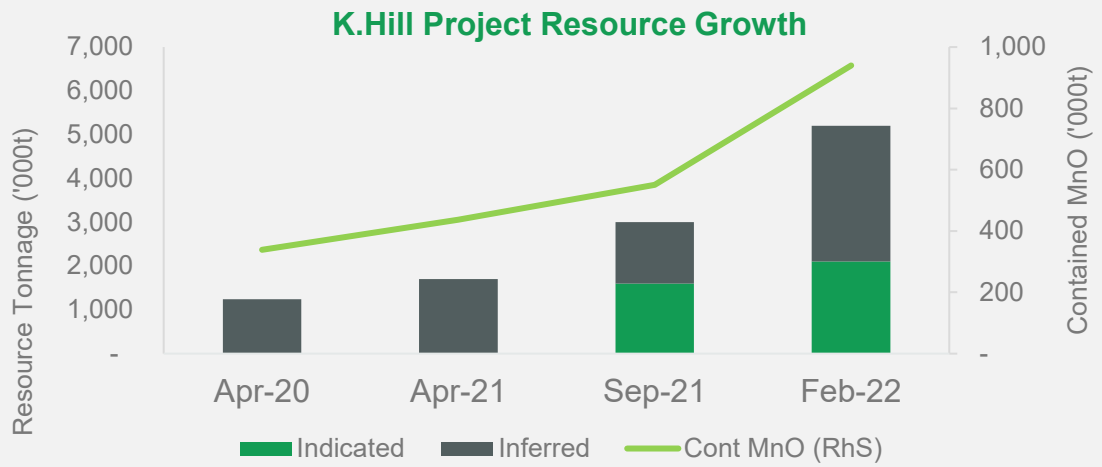

## Demonstration Plant

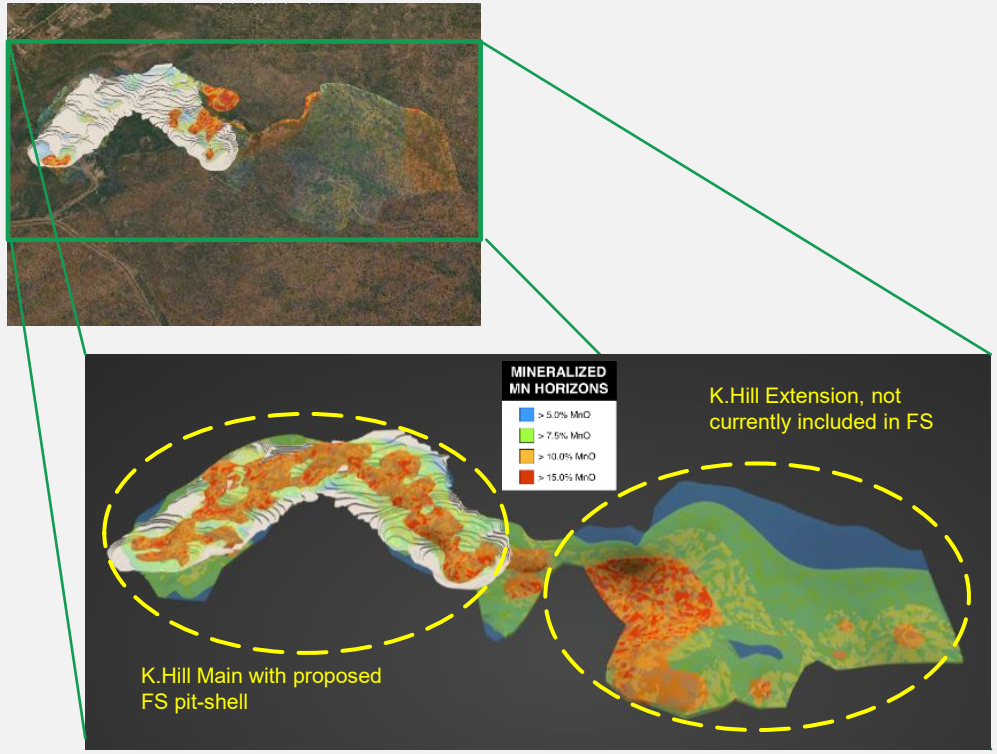
- Demonstration Plant will replicate the proposed hydrometallurgical process
- Design for up to 600 kg/d HPMSM for shipment to buyers for testing and qualification
- Construction during 2022 and product shipments expected in 2023

# GROWTH THROUGH SUCCESSFUL EXPLORATION AT K.HILL

| Classification (Feb 2022) | Tonnage Mt) | Grade MnO (%) | Contained MnO (kt) |
|---|---|---|---|
| Indicated Mineral Resources | 2.1 | 19.3 | 410 |
| Inferred Mineral Resources | 3.1 | 16.9 | 530 |

- Further exploration results expected through +4,000m infill drilling completed during 2022
- Plan to grow LOM beyond 20 years at current project operating parameters






K.Hill Manganese Project Independent Technical Report. SRK, March 2022

# FURTHER PORTFOLIO POTENTIAL


## OTSE

- High-grade supergene podiform manganese oxide mineralisation
- Initial drilling results at Otse have indicated a high grade podiform orebody with intersections >50% MnO
- Historic activity with licenses including two small-scale historically mined pits which are 2km apart and highlight mineralisation on surface
- Initial exploration completed in 2021 and maiden resources expected in Q4 2022

## LOBATSE

- Manganese oxide mineralisation hosted in a siliceous shale, which is similar mineralisation style to K.Hill
- Outcropping at surface and dipping at ~30 degrees towards the east
- Strike length ~2km
- Historical artisanal mining in the area
- Work to date consists of 3 diamond core exploration drill holes and underground surveying

# The Opportunity

# UPSIDE DRIVEN BY GROWTH CATALYSTS

## Completed

K.Hill PEA completed

Completed initial metallurgical test work and finalised initial process flowsheet

New K.Hill MRE of 2.1Mt in Indicated Category and 3.1Mt in Inferred

Purchase of long-lead items for Demonstration Plant

Completed K.Hill Solar Plant Study

Completion of initial exploration drilling campaign at Otse

## Near-term catalysts

Completion of K.Hill Feasibility Study (Q3 2022)

Signing of Demonstration Plant construction contract

Construction of Demonstration Plant

Product testing by battery and CAM producers

K.Hill resource upgrade

Maiden resource statement for Otse

Submission of ESIA and Mining Licence application

## Medium-term catalysts

Mobilisation of Demo Plant to Botswana

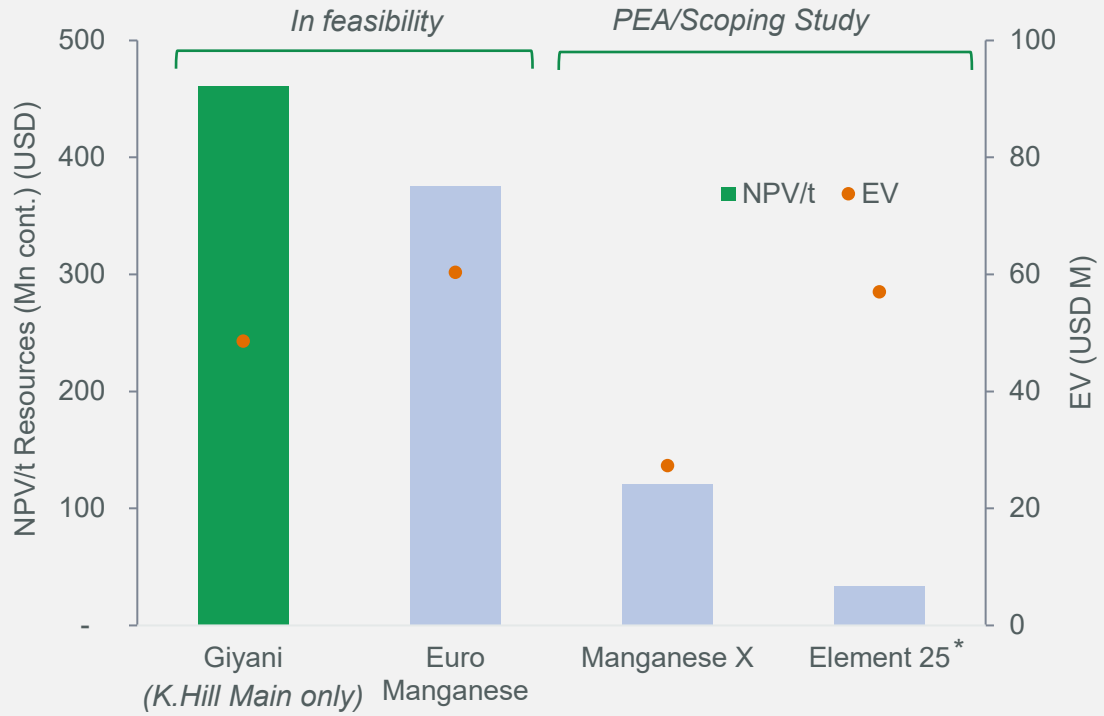
Signing of offtake agreements

Construction and development of K.Hill and processing facility

Commercial production

# STANDOUT OPPORTUNITY IN ITS PEER GROUP

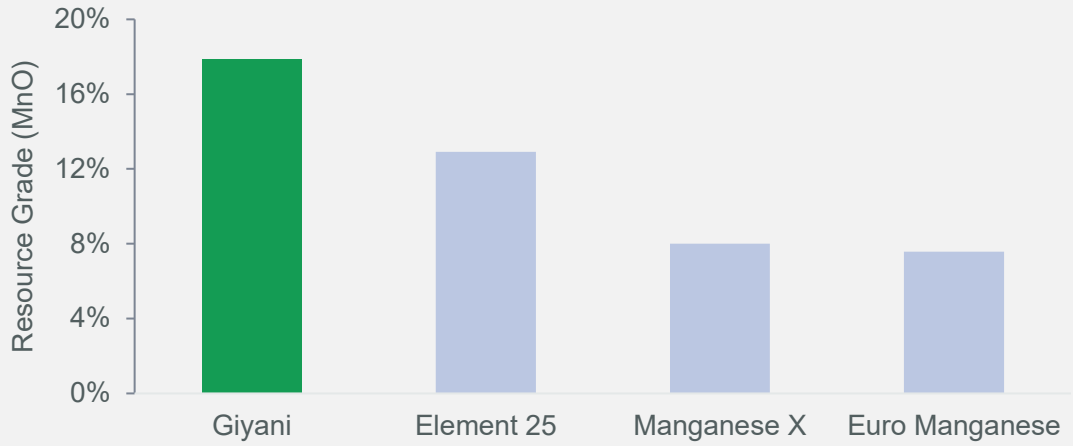
## Comparison of Project Profitability vs Enterprise Value




| | | | | |
|---|---|---|---|---|
| HPMSM Price Used | US$1,588/t | US$2,583/t | US$2,900/t | US$1,950/t |

- Only **four** listed companies are actively developing new HPMSM projects
- K.Hill is the **highest grade** listed HPMSM project and has the largest NPV per tonne (Mn) in the ground
- Giyani currently trades at the **lowest** P/NAV in its peer group and NAV only includes 1.7 Mt of K.Hill Main deposit

## Comparison of Project Ore Grades






Notes: Market data as at June 7, 2022; project data based on public company disclosure
* E25 currently producing Mn concentrate but planning HPMSM project in Indonesia

# STRONG SHARE STRUCTURE AND DEBT-FREE

| TICKER | MARKET CAP* | SHARE PRICE* | 52 WEEK RANGE | SHARES O/S | Warrants / Options / RSUs O/S |
|---|---|---|---|---|---|
| TSXV : EMM<br>OTC: CATPF | C$ 81.1M | C$ 0.39 | C$ 0.28 - 0.70 | 208,105,055 | 56,061,684 |


| MAJOR SHAREHOLDERS | |
|---|---|
| RAB Capital | 9.1% |
| Directors and Management | 3.0% |
| Primevest Capital | 3.0% |
| MMCAP Asset Management | 2.9% |
| APAC Resources | 1.4% |
| Sentry Resource Opportunities | 1.4% |
| Ausbil Investment Management | 1.4% |
| Pathfinder, Charlestown, Ixios, Black Maple | <1% |

| | DATE | PRIVATE PLACEMENT |
|---|---|---|
| 1 | 03 Dec 2021 | C$ 11.5M at 44.0¢/share |

| | TOTAL | EXERCISE PRICE | EXPIRY |
|---|---|---|---|
| Options* | 11,987,500 | C$ 0.15 - C$ 0.53 | 28/11/2022– 01/04/2027 |
| Warrants* | 43,979,844 | C$ 0.10 - C$ 1.00 | 23/06/2022 – 03/12/2023 |
| RSUs* | 94,340 | - | 21/04/2023 |



** As at June 5 2022*

# OUR STRATEGY

## Develop a market leading HPMSM product

Low carbon, selenium free critical raw material for electric vehicle market

Premier, mining friendly jurisdiction with strong standards of governance

Demonstration Plant to produce HPMSM product for early market testing

## Continually build resource base to feed growing demand

Demonstrated exploration pedigree

Growth from 1.7Mt Inferred to 2.1Mt Indicated and 3.1Mt Inferred Resources

Significant upside remaining with Otse and Lobatse prospects

Potential for globally significant production position

## Deliver a responsible, sustainable supply of HPMSM

Strong ESG principles ensure responsible, traceable production of critical metal to global mass market EV story

Low impact operation and integrate local and regional programmes

Create a long-lasting positive legacy for Botswana

# CONTACT US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**Oakville, ON**
**L6H 5R7**
**Canada**

**info@giyanimetals.com**

**giyanimetals.com**

**@GiyaniMetals**

#GiyaniMetals

# Appendix

# INTERNATIONAL MINE-BUILDING EXPERIENCE

## GIYANI METALS BOARD OF DIRECTORS

**JONATHAN HENRY**
**B.A.(HONS)**
**NON-EXECUTIVE CHAIR**

25 years of experience in mining company leadership and management

**JOHN PETERSEN**
**J.D, B.S.**
**NON-EXECUTIVE DIRECTOR**

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

**STEPHANIE HART**
**CPA, CA**
**NON-EXECUTIVE DIRECTOR**

20 years senior level experience with broad financial, risk, operational and capital project roles in global mining

**MICHAEL JONES**
**C.ENG.**
**NON-EXECUTIVE DIRECTOR**

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

**ROBIN BIRCHALL**
**MBA, M.SC.**
**CEO**

20 years of experience in investment banking, senior management and development of resource companies

## MENZI BATTERY (PTY) LIMITED DIRECTORS

**THUSO DIKGAKA**
**B.ENG.**
**NON-EXECUTIVE CHAIR**

Over 40 years of experience in operations, management and government within Botswana

**KNEIPE SETLHARE**
**BSC.**
**NON-EXECUTIVE DIRECTOR**

13 Years of operations experience in base metals and diamond drilling within Botswana

**MAUREEN MOKGAOTSANE**
**M.ENG.**
**NON-EXECUTIVE DIRECTOR**

Over 20 years of experience in exploration, management and government within Botswana

**MICHAEL JONES**
**NON-EXECUTIVE DIRECTOR**

**ROBIN BIRCHALL**
**EXECUTIVE DIRECTOR**

## GIYANI METALS SENIOR MANAGEMENT

**DERK HARTMAN**
**PRESIDENT & COO**

20 years of experience in investment banking, senior management, project delivery and development of resource companies

**EUGENE LEE**
**CFO**

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

**GEORGE DONNE**
**VP BUSINESS DEVELOPMENT**

20 years of international natural resources sector experience in senior management and investment banking roles

**MARION THOMAS**
**VP ESG**

Over 35 years of experience in environmental and social of large-scale, complex projects across Africa including Botswana

**DIRK GEERLIGS**
**VP PROJECT DEVELOPMENT & CONSTRUCTION**

20 years' experience in construction and project delivery of mining and industrial projects globally

**JACQUES DU TOIT**
**VP TECHNICAL SERVICES**

20 years' experience in mining project development worldwide. Previously with BHP and consultant on the K.Hill Project for TetraTech

# GROWING A PROJECT DELIVERY TEAM

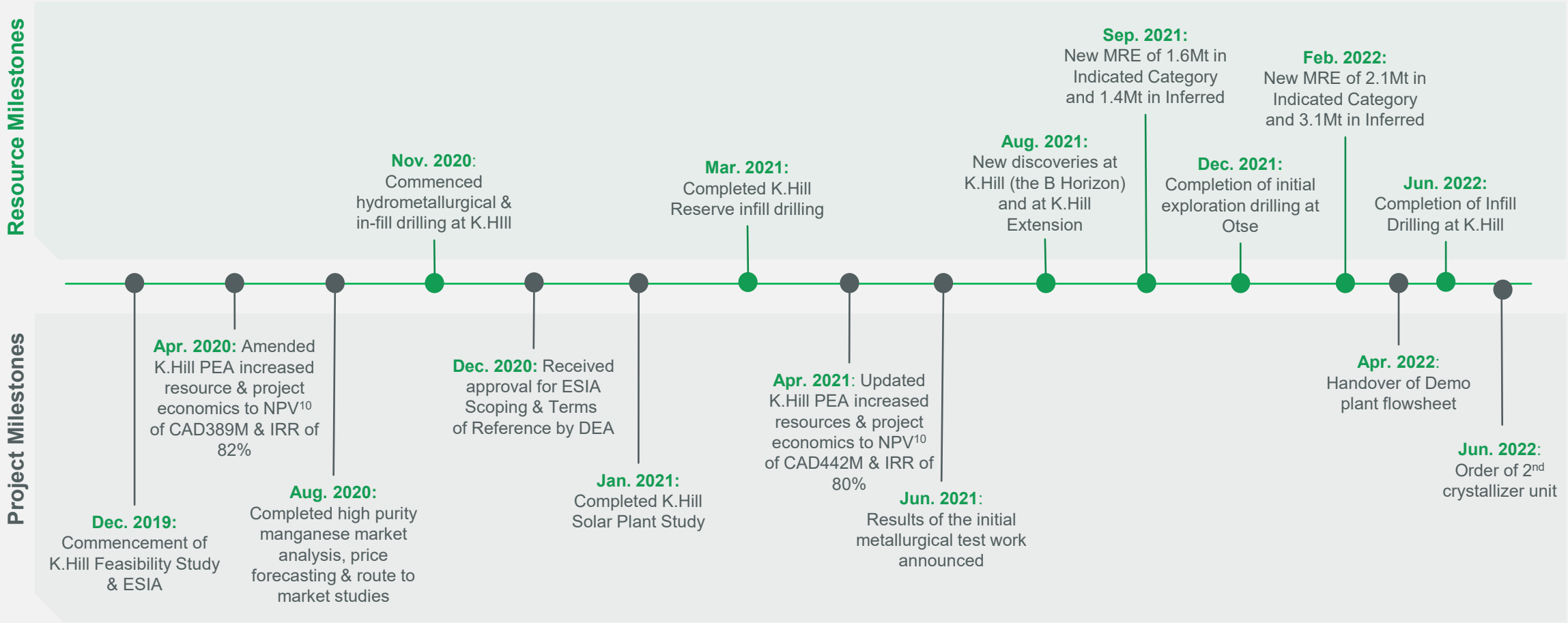
**January 1, 2021**

- **Robin Birchall** — CEO
- **Luhann Theron** — Chief Geologist
- **Judith Webster** — Corporate Secretary

**June 1, 2022**

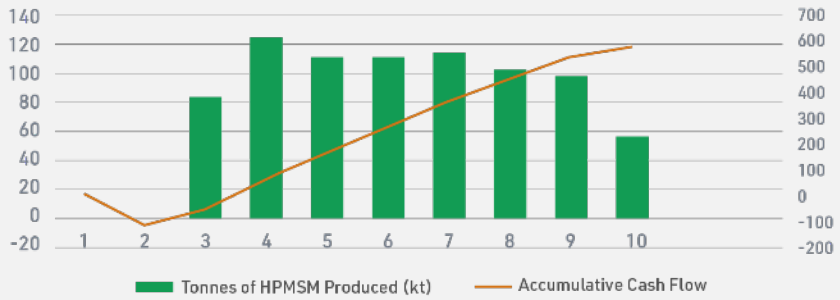
- **Robin Birchall** — CEO
- **Derk Hartman** — COO
- **Eugene Lee** — CFO
- **Marion Thomas** — VP ESG
- **Luhann Theron** — Chief Geologist
- **Judith Webster** — Corporate Secretary
- **Malika Arora** — Controller
- **George Donne** — VP Business Development
- **Dirk Geerligs** — VP Project Development & Construction
- **Jacques du Toit** — VP Technical Services
- **Elisa Davis** — Country Manager

# SIGNIFICANT PROGRESS TO DEVELOPMENT

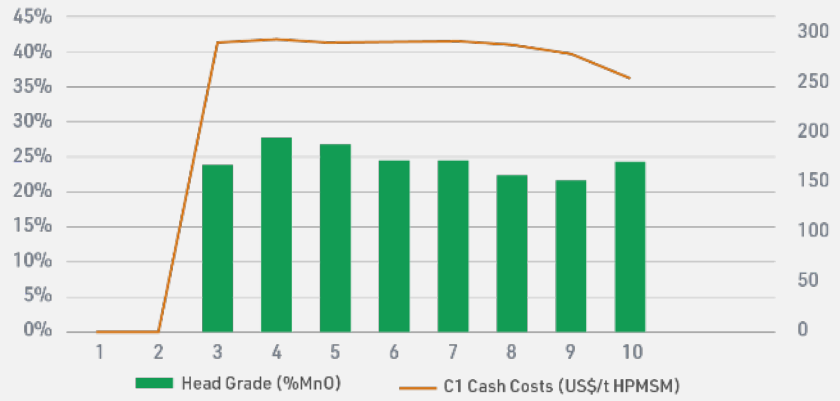


# K.HILL PROJECT PEA (APRIL 2021)

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




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




- K.Hill is the highest valued project in its peer group on an NPV/t Mn resources basis but Giyani trades at the lowest P/NAV
- April 2021 PEA highlights
  - After tax NPV[10] of **USD332M** and IRR of **80%**
  - Start-up capex of USD118M
  - Three year payback
  - 58 – 125kt per annum of HPMSM (or equivalent)
- PEA based on K.Hill Main horizon **ONLY** as at April 2021; does **not** include production from K.Hill B Horizon, K.Hill Extension, Otse or Lobatse

### Value Upside

- Significant resource upside from K.Hill B Horizon, K.Hill Extension, Otse and Lobatse
- Reducing power costs through phased solar integration
- Increased plant throughput to match increased resources
- Rising HPMSM prices on higher EV and battery demand
- Value premium for ex-China, low carbon HPMSM production



1. K.Hill Manganese Project Independent Technical Report. SRK, April 2021
2. USD:CAD 1.33 average over past 12 months

# DEMONSTRATION PLANT

# BUILDING STRONG STAKEHOLDER RELATIONS

Elisa Davis and Thuso Dikgaka with His Excellency President Mokgweetsi Masisi and Minister of Minerals and Energy