sunrise energy metals

IVANHOE MINES NEW HORIZONS

i-PULSE HighPowerSystems

Ivanhoe ELECTRIC

Into an electric future

Using our resources smarter, less and longer

Robert Friedland

June 2021

WORLD MATERIALS FORUM

Cautionary statement

Certain statements in this presentation constitute “forward-looking statements” or “forward-looking information” within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of Sunrise Energy Metals Limited, Ivanhoe Mines Ltd., the Sunrise Energy’s Sunrise Project (“Sunrise”, the “Project” or the “Sunrise Project”), or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as “may”, “would”, “could”, “will”, “intend”, “expect”, “believe”, “plan”, “anticipate”, “estimate”, “scheduled”, “forecast”, “predict” and other similar terminology, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. These statements reflect the Company’s current expectations regarding future events, performance and results, and speak only as of the date of this presentation.

Statements in this presentation that constitute forward-looking statements or information include, but are not limited to: statements regarding the negotiation and conclusion of further offtake agreements; the settlement of completion of a term sheet from the MLA group prior to the FID; the potential investment by a strategic investor and/or additional financing; completing of final design and detailed engineering work; making a Final Investment Decision; statements relating to the timing of commencement and/or completion of construction of the Sunrise Energy Project, commissioning, first production and ramp up; and the potential for a scandium market to develop and increase.

In addition, all disclosure in this presentation related to the results of the Sunrise Project’s Definitive Feasibility Study (the “DFS”) announced on June 25, 2018, constitute forward-looking statements and forward- looking information. The forward-looking statements includes metal price assumptions, cash flow forecasts, projected capital and operating costs, metal recoveries, mine life and production rates, and the financial results of the DFS. These include statements regarding the Sunrise Project IRR; the Project's NPV (as well as all other before and after taxation NPV calculations); life of mine revenue; average annual EBITDA; capital cost; average C1 operating cash costs before and after by-product credits; proposed mining plans and methods, the negotiation and execution of offtake agreements, a mine life estimate; project payback period; the expected number of people to be employed at the Project during both construction and operations and the availability and development of water, electricity and other infrastructure for the Sunrise Project, as well as the indicative project schedule.

Readers are cautioned that actual results may vary from those presented.

All such forward-looking information and statements are based on certain assumptions and analyses made by Ivanhoe and Sunrise Energy Metals management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; changes in investor demand; the results of negotiations with project financiers; the failure of parties to contracts to perform as agreed; changes in commodity prices; unexpected failure or inadequacy of infrastructure, or delays in the development of infrastructure, and the failure of exploration programs or other studies to deliver anticipated results or results that would justify and support continued studies, development or operations. Other important factors that could cause actual results to differ from these forward-looking statements also include those described under the heading "Risk Factors" in the Company's most recently filed Annual Information Form.

Readers are cautioned not to place undue reliance on forward-looking information or statements.

Although the forward-looking statements contained in this presentation are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this presentation and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this presentation.

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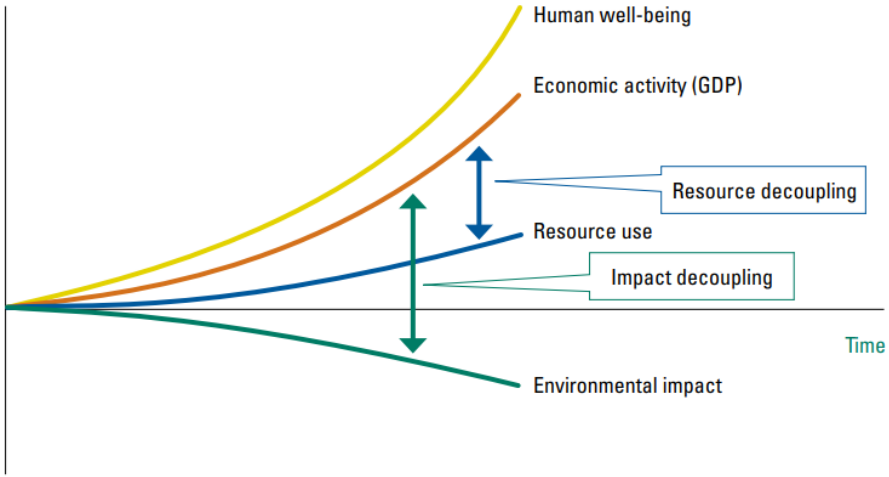
Sustainable resource management

Objective: Decouple economic growth from the use of our natural resources while creating value for our industries

Figure 1. Two aspects of 'decoupling'



Source: United Nations Environment Programme

This starts with mining and efforts to use our resources smarter, less and longer.

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We need to use metals efficiently

Note: Area represents the global sales value of the commodity at today's prices

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Supply chain challenges now making headlines

Mining is the Next Global Energy Security Threat, IEA

Nasdaq June 2021

The bottlenecks which could constrain emission cuts

The Economist June 2021

Stress-testing supply chains is key to a durable global recovery

FINANCIAL TIMES June 2021

G7 commits to removing forced labor from global supply chains - U.S. says

REUTERS June 2021

Biden Administration Moves to Fix Supply Chain Bottlenecks

The New York Times June 2021

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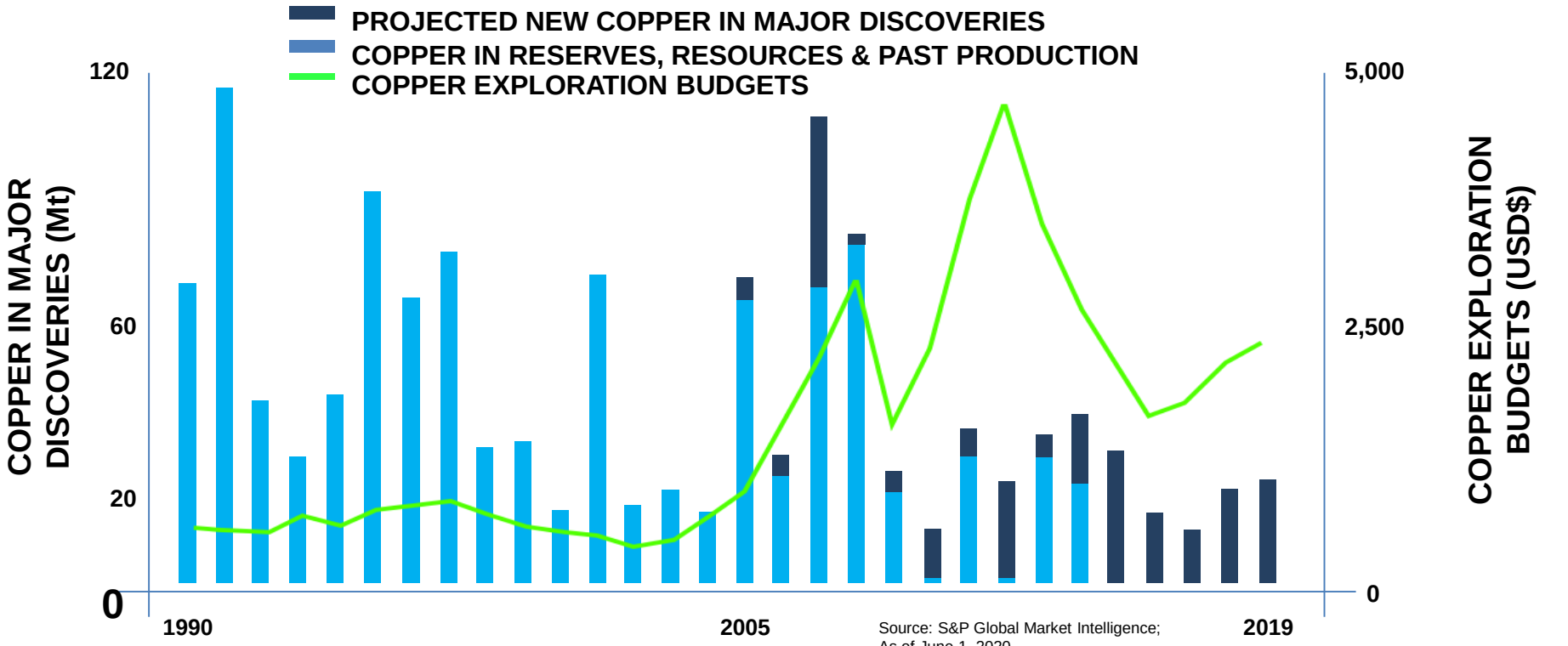
Electric metals – mine development takes time



Source: S&P Global Market Intelligence;
As of June 1, 2020

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Using our resources smarter


Ivanhoe Mines, Kamoa Kakula, Democratic Republic of Congo

- **BEST QUALITY OF ORE**
- **ALIGN INTEREST OF ALL STAKEHOLDERS**
- **WORLD-CLASS MULTINATIONAL TEAMS, DEVELOPING LOCAL**

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Best quality of ore

Bags of Kamoa-Kakula copper concentrate ready for export to international markets

- **Kamoa-Kakula will have an average grade of 5.9%(1) copper over the initial 10 years of operations**
- **Higher-grade ore reduces energy consumption, surface footprint, waste and environmental impacts**
- **The flat-lying nature of the Kamoa-Kakula geology allow for cutting-edge underground mining leveraging modern automation and technologies**
- **Kamoa-Kakula is expected to produce a very high-grade, clean concentrate grading approximately 57% copper, with extremely low arsenic levels**

(1) Average grade over first 10 years of the 7.6 Mtpa PFS case.

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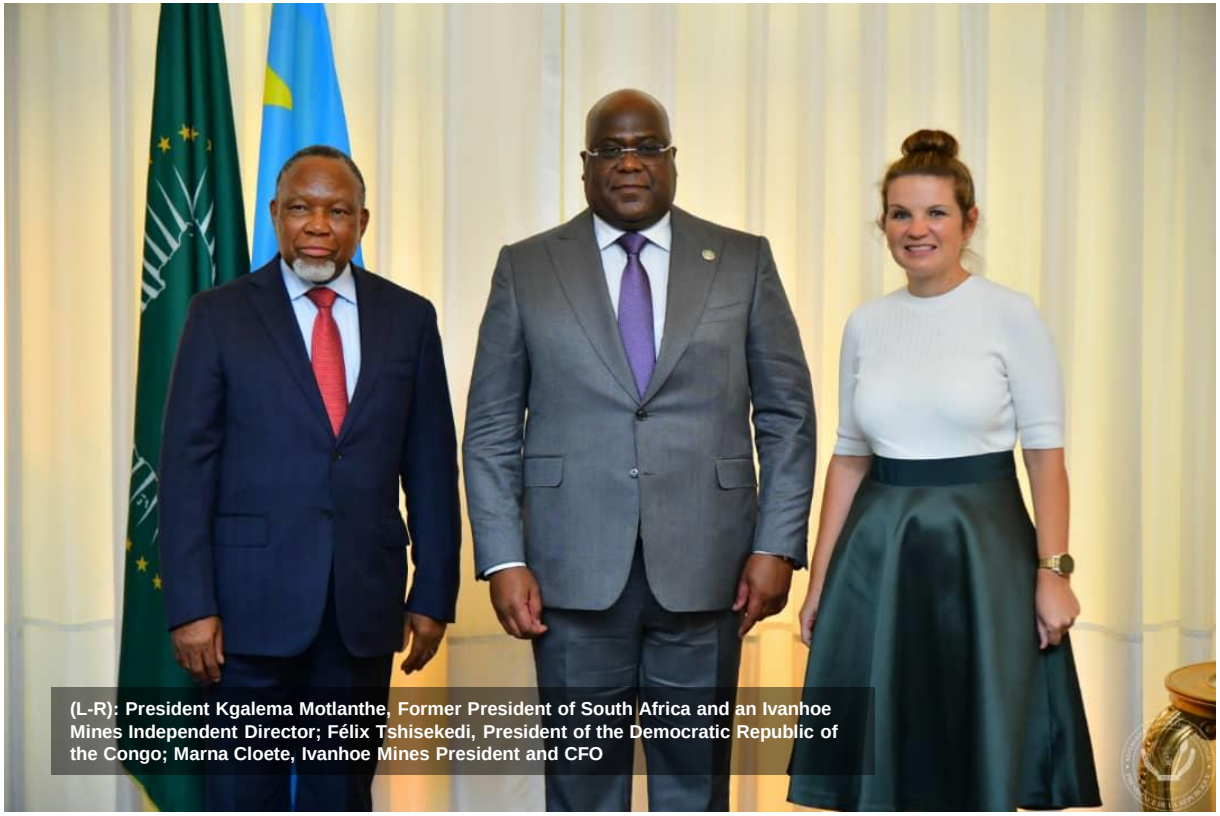
Align interest of all stakeholders



(L-R): President Kgalema Motlanthe, Former President of South Africa and an Ivanhoe Mines Independent Director; Félix Tshisekedi, President of the Democratic Republic of the Congo; Marna Cloete, Ivanhoe Mines President and CFO

- **7,000 employees and contractors helped to build Kamoa-Kakula, of which approx. 90% are Congolese**
- **Kamoa Copper has off-take agreements with CITIC Metal and Gold Mountains (H.K.) International Mining Company Limited, a subsidiary of Zijin for Phase 1 production**
- **The *Sustainable Livelihoods Program* was founded to strengthen food security and farming capacity in the host communities near Kamoa-Kakula by establishing an agricultural training garden and support for farmers at the community level**

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World-class multinational teams, developing local talent

Members of Ivanhoe's and Kamoa-Kakula's multinational senior management teams at Kakula's Phase 1 concentrator's pneumatic control valves. L-R: Abraham Li (Director & Deputy General Manager, Kamoa Copper); Steve Amos(Head of Projects, Kamoa Copper); Annebel Oosthuizen (Executive, Finance, Kamoa Copper); Ben Munanga (Chairman, Kamoa Copper); Marna Cloete (President and CFO, Ivanhoe Mines); Mark Farren(CEO, Kamoa Copper); Rochelle de Villiers(Co-CFO, Kamoa Copper);Minty Cai (Co-CFO, Kamoa Copper); and Olivier Binyingo (VP Public Affairs DRC, Ivanhoe Mines)

- **In 2020, 175 employees across various organizational levels were enrolled in a wide range of educational development programs, such as certificate or diploma courses, and degrees**
- **Kamoa-Kakula's 2020 community skills development initiatives focused largely on providing 194 core-to-mining training opportunities at our Kansoko Training Centre**
- **Other community skills development investments included 416 non-core-to-mining training opportunities, focused largely on agricultural and textile training**

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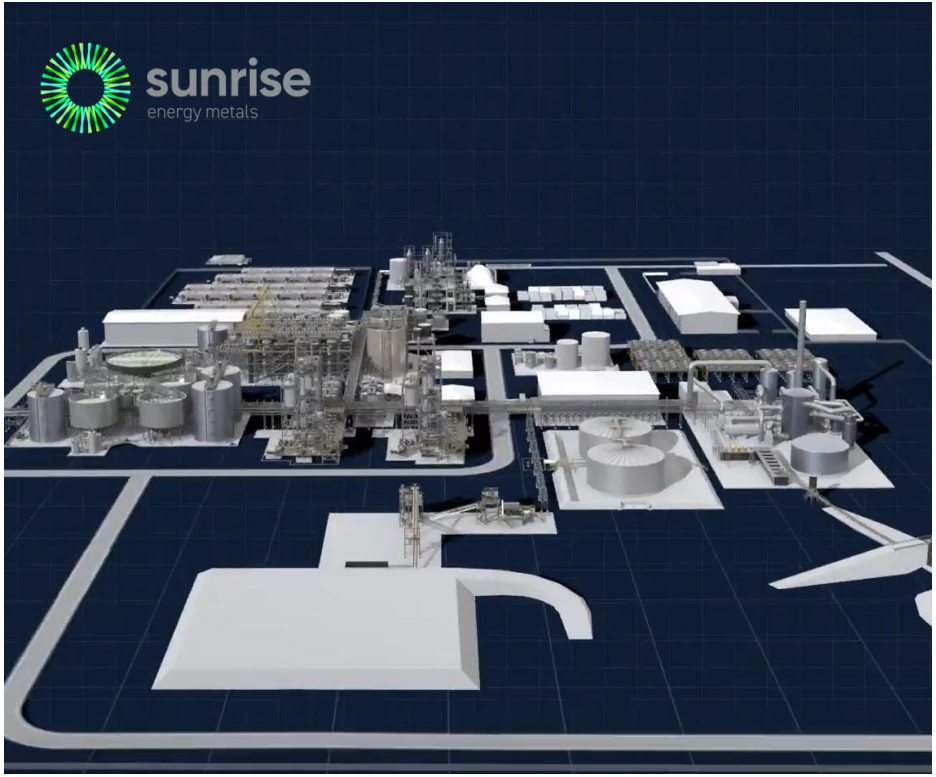
Using our resources less and longer



- SPEED UP THE USE OF GREEN TECHNOLOGIES
- DESIGN TO COST EVERYWHERE
- DRIVE DOWN OPERATING COSTS AND ENVIRONMENTAL FOOTPRINT

i-PULSE
HighPowerSystems

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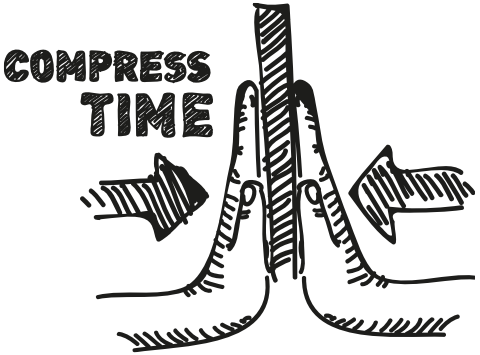
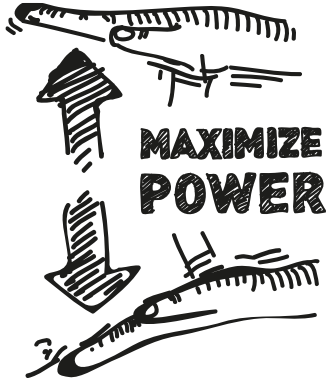
Speed up use of green technologies

HIGH PULSED POWER TECHNOLOGY



We compress the energy in time and space



To release a power equivalent to a nuclear reactor

I-Pulse tools have the capacity to release the power output of a **nuclear power** reactor **for a billionth of a second** – achieved at the cost of the electricity required to turn on a light bulb.

Speed up use of green technologies

Sunrise Design Principles: Building a robust supply chain for the global battery industry

Cost

Ion exchange is the simplest, lowest-cost and most direct route to battery-grade metal, by- passing intermediate products and third-party refining

Sustainability

Sourcing 100% renewable power, Sunrise will have one of the lowest carbon footprints in the industry and is in Australia's largest renewable energy corridor

Recycling

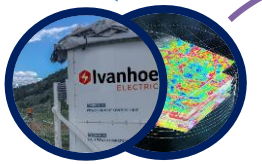
The Sunrise refinery will be designed to take recycle streams from spent cathode and recover nickel, cobalt and other metals

D2P

Ion exchange provides the opportunity to go Direct to Precursor (D2P) by keeping metal in solution and ultimately avoiding crystallisation

Drive down operating costs and environmental footprint

Ivanhoe ELECTRIC



APPLIED TECHNOLOGIES

Typhoon™ & *CGI

*Computational Geosciences Inc.

- **Highly disruptive technology** enabling faster and more cost-effective project evaluation
- Widely applicable to **water, oil and sulphide** minerals containing copper, nickel, gold, silver
- **Increased efficiency, lower environmental footprint**

EXPERTISE

Discovered over $1.9 trillion[1] of mineral deposits*

*USA and Global

- Leveraging world-class geologists, scientists and technologies
- Copper, nickel, gold, silver and vanadium are the **metals critically required for global electrification**

ENERGY STORAGE

VRB Energy
Vanadium Redox Flow Batteries*

*USA and China

- Superior, patented technology offers lowest lifecycle cost of energy
- Existing facilities with large-scale energy storage capability
- Recently awarded **largest solar battery in China** – 100 MW / 500 MWh

1. Based on value of contained metals.