TSX-V: NMI OTCQ: NMREF

# CRITICAL METALS INC.

# Namibia Critical Metals Accelerating Development of Lofdal A World Class Heavy Rare Earth Deposit

June 2022

#### **Forward Looking Statements**



This presentation contains forward-looking statements that relate to the Company's current expectations and views of future events. Rainer Ellmies, EurGeol, is the Company's Qualified Person and has reviewed and approved the content of this presentation.

In some cases, these forward-looking statements can be identified by words or phrases such as "may", "will", "expect", "anticipate", "aim", "estimate", "intend", "plan", "seek", "believe", "potential", "continue", "is/are likely to" or the negative of these terms, or other similar expressions intended to identify forward-looking statements. The Company has based these forward-looking statements on its current expectations and projections about future events and financial trends that it believes may affect its financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to (i) the Company's strategy, growth, development and acquisition opportunities, return on existing assets, operational excellence and financial management; (ii) the Company's expectations regarding its revenue, expenses and operations; (iii) the Company's ability to raise additional capital; (v) the Company's expectation and operating performances of the Company and its subsidiaries; (vi) the estimation of any mineral resource, estimates and estimated future development, if any, and possible variations of ore grade or recovery rates; (vii) estimated results of planned exploration and development activities; (viii) the Company's competitive position and its expectations regarding competition from other companies globally; (ix) the Company's ability to maintain customer and supplier relationships; (x) anticipated trends and challenges in the Company's business and the markets in which it operates, including with respect to potential new rare earths projects, supply outlook and growth opportunities; (xi) limitations of insurance coverage; (xii) the future price of and future demand for rare earths elements and their derivative products; (xiii) economic and financial conditions; (xiv) interest rates and foreign exchange rates; (xv) performance of counterparties in fulfilling their obligations; (xvi) government regulation of mining operations; (xi

Forward-looking statements are based on certain assumptions and analyses made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments and other factors it believes are appropriate. These assumptions include continued political stability in Namibia, that permits required for the Company's operations will be obtained in a timely basis in order to permit the Company to proceed on schedule with its planned drilling programs, that skilled personnel and contractors will be available as the Company's operations continue to grow, that the price of rare earths will remain at levels that will render the Company's projects economic and that the Company will be able to continue raising the necessary capital to finance its operations. Forward-looking statements involve a variety of known and unknown risks, uncertainties and other factors, including those listed under the heading "Risk Factors" in the Company's Annual Financial Report dated November 30, 2021 (filed on SEDAR www.sedar.com), which may cause the Company's actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements.

The forward-looking statements made in this presentation relate only to events or information as of the date on which the statements are made in the presentation. Except as required by law, the Company undertakes no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, a future event or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events.

There can be no assurance that such forward looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, potential investors should not place undue reliance on forward-looking information.

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#### **Market Capitalization**



Listings	TSX Venture Exchange ("NMI"
Head Office	Halifax, Nova Scotia
<b>Operations Office</b>	Windhoek, Namibia
Shares Issued	196,634,399
Options	12,125,000
Warrants	6,903,766
Fully Diluted	215,663,165
Insider Ownership	24%
Single Largest Shareholder	42%
(Bannerman Energy – ASX:BI	MN)
Market Capitalization	<b>CAD \$34.5 million</b> (May 30, 202
	CAD \$71 million (June 1, 2021)

'NMI"), OTCQ ("NMREF")



#### Project Generation and Development Team with Strong Track Record in Africa





#### William L. Price - Chair:

Mr. Price is the former Chairman and Global Chief Investment Officer of Dresdner RCM Global Investors and CIO for equities at Allianz Dresdner RCM. Following his retirement in 2003, Mr. Price has been a private investor and CEO of the William L. Price Charitable Foundation. He has served as a corporate director of several publicly traded companies. A graduate of Dartmouth College and a Graduate Fellow (Political Science) at Brooklyn College, Mr. Price worked for the US Department of State before going to Wall Street as a securities analyst. He joined Rosenberg Capital Management in 1976 and became Chairman and CEO in 1996. For fifteen of those years he was a guest lecturer at the Graduate School of Business at Stanford University.

#### Darrin Campbell, B.Com, CPA-CMA - President:



Mr. Campbell is a Chartered Professional Accountant and Certified Management Accountant with 20 years of executive financial management experience and served as the CFO of the Company from March 2017 – 2021. He has provided contract accounting and financial services to numerous public and private companies and played key leadership roles in financings and transactions taking companies public onto the TSX-V. From 2013-2014 he was the CFO of Ressources Appalaches and was the financial leader bringing into production Nova Scotia's first operating gold mine in over 14 years. Mr. Campbell obtained a Bachelor of Commerce from Saint Mary's University in 1996 and is a member of the Chartered Professional Accountants of Nova Scotia.



#### Rainer Ellmies, PhD, MSc, GeolFA, EurGeol, AusIMM – Vice President Exploration:

Dr. Ellmies is based in Windhoek and provides all in-country management of Namibia Critical Metals' projects in his capacity as Vice President Exploration. He develops the company's geological concepts and exploration strategies and implements those with our dynamic exploration teams in Namibia. Dr. Ellmies has a broad background with over 30 years experience in academics, exploration, international development cooperation. He has been directly involved in a number of significant discoveries in Namibia and internationally including the following deposits: Lofdal HREE, Opuwo Cobalt, Ondoto LREE and Epembe Ta-Nb.

#### Project Generation and Development Team with Strong Track Record in Africa





Gerry McConnell, QC-Strategic Advisor Founder of Namibia Rare Earths (now Namibia Critical Metals Inc.) with IPO financing of C\$28m. Former Chair, Founder and CEO of NovaGold Resources; former Chair and CEO of **Etruscan Resources** (16 years in West African gold); former Chair of **Trilogy** Metals where South32 has option on Alaskan copper projects (US\$150M for 50%).

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Barbara Mulcahy, B.Eng, PR.Eng -**Metallurgical Advisor** Based in South Africa, Barbara has 25 years experience in the metallurgical consulting, project process engineering design & development and research sectors. Her experience includes metallurgical project development from geology and mine development through to ore dressing and refining, process engineering design and project development.



Kaarina Ndalulilwa, BScGeol -**Chief Geologist** Ms. Ndalulilwa is a geologist based in Namibia. Over her 10 years tenure in mineral exploration, Kaarina has and continues to support the company's management in the execution of projects ranging from geological field work to project management. She has been responsible for the site management of exploration work on a number of projects such as the Lofdal HREE Project and the Opuwo Cobalt Project of Celsius Resources.



Uda Nakamhela, B.A. LL.M. - Legal, Environment, Community Relations & Governance Mr. Nakamhela has over 20 years of experience in ESG in the Namibian exploration, mining and

tourism sectors. Mr. Nakamhela has been a Legal Practitioner of the High Court of Namibia since 29 July 2002. From 2003 to 2005 he worked as coordinator of the Community Based Natural Resource Management Unit for the Namibia Nature Foundation.



Donald M. Burton, MSc, PGEO –

**Geological Consultant** Mr. Burton is a Professional Geologist with over 25 years of experience. During 1994-2010 he was responsible for projects of Etruscan Resources Inc. (now Endeavour Mining Corp.) in Niger, Burkina Faso, Mali, Ghana, and Cote d'Ivoire. During this period, Samira Hill and Youga evolved into operating gold mines and Agbaou entered into commercial production. As former President of Namibia Critical Metals he oversaw the development of the Lofdal Rare Earths Project from 2010 until his retirement in 2021.



Scott Swinden, PhD, PGEO – Geological Consultant Dr. Swinden is President

and Principal Consultant of Swinden Geoscience Consultants Limited. Dr. Swinden provides consulting services in geoscience, exploration, and resource administration. He has over 40 years experience in exploration, research and project and executive management in private and public sectors. Dr. Swinden has worked extensively on the Lofdal and the **Epembe Projects.** 



## Namibia – Top Mining Investment Destination in Africa







**NAMIBIA** CRITICAL METALS INC.



✓ Mining friendly



## NMI - Successful Explorer with Value Driven Project Portfolio

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Namibia Critical Metals is a well established exploration company in Namibia

Focus is development of the Lofdal <u>HREE</u> deposit through feasibility to production. Fully funded by JOGMEC.

Current greenfields exploration focus is on **gold** in the Central Namibian Gold Belt.

NMI is actively evaluating new exploration opportunities in Namibia covering battery and base metals projects as well as gold.





#### **NMI Milestones**



- 2011 NMI (Namibia Rare Earths) spun out from sale of Etruscan Resources to Endeavour Mining with \$28M IPO
- 2012 Maiden 43-101 Resource on Lofdal Heavy Rare Earth project (6.2 Mt Indicated and Inferred Resources)
- 2014 PEA Lofdal Area 4: 1500 t/a TREO production; Capex \$175M; NPV \$240M; IRR 53% pre-tax
- 2018 Acquisition of portfolio of critical metal projects from Gecko Namibia (Pty) Ltd (now largest shareholder @ 41% Position sold May 2022 in private transaction to Bannerman Energy ASX:BMN

January 27, 2020 – NMI announces agreement with Japan Oil Gas and Metals National Corporation (JOGMEC) to jointly develop the Lofdal HREE project. First term commitment of CD\$3M to double resource size and advance metallurgical flowsheet; second term option to fund CD\$7M to acquire 40% interest and third term option to fund CD\$10M to acquire additional 10% interest; option to purchase 1% for CD\$5M to reach 51%; right to fully fund to production and offtake at market prices





## **Development of Lofdal Deposit in Partnership with JOGMEC**

- Japan Oil, Gas and Metals National Corporation (JOGMEC) has +/-US\$17 billion budget mandated to secure critical commodity supplies for Japanese industry
- Strategic joint venture **providing 100% funding** for Lofdal with right to sole fund to production
- Japan consumes about 160 t/a Dy2O3 and Lofdal could produce >130 t/a Dy2O3 based on historic 2014 PEA
- Development of Lofdal could secure heavy rare earths supply (Dy-Tb) for Japanese industry; prices rising

		Price	e USD/Kg			Price	e USD/Kg
Light REE	La2O3	\$	1.43	Heavy REE	Eu2O3	\$	31.00
	CeO2	\$	1.46		Gd2O3	\$	85.71
	Pr6O11	\$	133.00		Tb4O7	\$	2,195.00
	Nd2O3	\$	135.50		Dy2O3	\$	392.50
	Sm2O3	\$	4.52		Ho2O3	\$	188.64
					Er2O3	\$	62.50
					Tm2O3	\$	500.00
					Yb2O3	\$	17.74
					Lu2O3	\$	787.88
					Y2O3	\$	14.25

Lofdal Rare Earth Deposit is 86% Heavy REE





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# **Lofdal Deposit Significant for Global HREE Supply**

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2021

Highcharts.com

The only two significant HREE projects in the world with <u>simple xenotime mineralogy</u> are Lofdal and Browns Range (Australia).

Dysprosium Oxide (Dy) ask price chart Click and drag in the plot area to zoom in



Note: NMI is targeting to increase annual production from 1,500 tpa TREO ("Lofdal PEA") to 3,000 tpa TREO ("Lofdal Target")

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#### **Accelerated Exploration and Project Development**



- 2020 Drilled over 16,000 meters
- 2021
- April JOGMEC moves to Term 2 of JV and accelerates expenditures
- May Updated 43-101 Resource on Lofdal Area 4 and Area 2B:
  - More than 650 Percent Increase in Measured and Indicated tonnes TREO
  - Total resources increased from 6 Mt to 53 Mt
  - 4,733 tonnes dysprosium and 725 tonnes terbium in MI&I
- July Mining License issued for Lofdal for 25 years
- **Sept** Starter pit at Area 4 opened Pilot-scale test phase
- **Oct** Hydrometallurgical test work produces 98% Rare Earth Oxide product
- **Nov** 34kt bulk sample mined for pilot scale sorting test work. 4.5 tonnes sent for final processing tests to global leaders in REE met test work with aim to freeze flow sheet by mid 2022

#### 2022

ΝΑΜΙΕ

- **Feb** Erongo Gold geophysics program completed first drill targets generated
- April Start of reconnaissance drilling at first Erongo gold target







#### **NMI** Milestones

		Lofdal Drilling Summary						
	2008	-2016	JOGMEC 2020		TOTAL PROJECT			
Area	Holes	Meters	Holes	Meters	Holes	Meters		
2	30	3398			30	3,398		
2B			29	4,400	29	4,400		
4 Resource	110	12,634	56	10,162	166	22,796		
4 Metallurgy	6	1,022			6	1,022		
5	57	5,595			57	5,595		
6	24	4,495			24	4,495		
7	1	239			1	239		
8	7	1,021			7	1,021		
Northern Splay			10	1,276	10	1,276		
Dolomite Hill			4	377	4	377		
TOTAL DRILLING	235	28,404	99	16,215	334	44,619		



Expenditures 2008 – 2020 JOGMEC Expenditures 2020-22 \$24,000,000 <u>\$ 7,000,000</u>

#### TOTAL PROJECT EXPENDITURES TO DATE \$31,000,000





### Lofdal Heavy Rare Earths Deposit: Update on Project Development

- Maiden Resource of 6.18 <u>Mt@0.24%</u> HREO (Area 4, PEA 2014)
- Xenotime mineralisation of economic importance is associated with jogs of carbonatite-albite alteration and focussed in structural step-over zones
- Drilling of 14,562 m at Area 4 and Area 2B in 2020 resulted in **updated Mineral Resource Statement**
- SGS Canada contracted as lead consultant metallurgy: mechanical processing advanced, testwork launched on hydrometallurgy (external review by UIT Dresden)
- Flowsheet: XRT/XRF sorting→flotation→mag sep→acid bake→Th-free HREE product for export
- Mining Licence 200 issued for Lofdal deposit for 25 year term

# Lofdal HREE mineral province is of district scale with numerous HREE deposits

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#### NMI Tenements in Namibia's Gold Belt

Central Namibian Gold Belt hosts >6 Moz in two gold mines: Otjikoto Mine of B2Gold (BTG:TSX) and Navachab Mine of QKR. Renewed interest in the belt driven by more advanced exploration projects such as Twin Hills of Osino Resources (OSI:TSX)

- All significant gold occurrences are structurally controlled orogenic gold deposits related to the Damaran Orogeny, hosted by a variety of lithologies at different stratigraphic levels
- NMI's Grootfontein and Otjiwarongo projects (total of 1,760 km<sup>2</sup>) are on strike with key structures at B2Gold's Otjikoto Gold Mine
- NMI's **Erongo project** (337 km<sup>2</sup>) is situated 30 km north of Navachab Gold Mine and within 10 km of Osino's Twin Hills gold discovery





#### **Near Term Corporate Objectives**



✓ Develop Lofdal with JOGMEC through feasibility to production
 ✓ Demonstrate gold potential at Grootfontein and Erongo



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# Summary

- Lofdal Mineral Resource Statement exceeded all expectations and with 25 year mining licence issued, Lofdal is now a fully permitted project.
- ✓ Metallurgical test work extended and accelerated with positive results on improvements of preferred flowsheet
- Advanced gold exploration targets ready to advance to drilling in emerging gold belt in a Tier-1 mining jurisdiction
- ✓ Joint venture secured on flagship Lofdal Rare Earths project allows for dedication of funds to advance gold projects
- ✓ Experienced project teams in place in Namibia
- ✓ ESG program rolled out and strengthened
- ✓ News flow from gold projects will be augmented with updates on JOGMEC JV to drive share price

#### Right tenements - Right team - Right place - Right time



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