



Cautionary Statements

This presentation contains certain forward-looking statements and forward-looking information concerning anticipated developments in the operations of PolyMet Mining Corp. ("PolyMet") in the future, including, without limitation, the statements regarding the ongoing development of PolyMet's NorthMet Project and the results of the feasibility study on the permitted base case for the NorthMet Project as well as results of the preliminary economic assessments ("PEA") on two expansion cases for the NorthMet Project. Forward-looking statements are frequently, but not always, identified by words such as "expects," "anticipates," "believes," "intends," "estimates," "potential," "possible," "projects," "plans," and similar expressions, or statements that events, conditions or results "will," "may," "could," or "should" occur or be achieved or their negatives or other comparable words. These forward-looking statements may include statements regarding our beliefs related to the expected project development timelines, exploration results and budgets, reserve estimates, mineral resource estimates, continued relationships with current strategic partners, work programs, estimated capital and operating costs and expenditures, actions by government authorities, including changes in government regulation, the market price of natural resources, estimated production rates, ability to receive and timing of environmental and operating permits, estimated construction costs, job creation and other economic benefits, or other statements that are not a statement of fact. In addition, and for greater certainty, the results of (i) the feasibility study on the permitted base case of the NorthMet Project, and (ii) the PEAs on the two expansion cases for the NorthMet Project, constitute forward-looking information, and include future estimates of internal rates of capital and operating costs.

Forward-looking statements and forward-looking information address future events and conditions and therefore involve inherent known and unknown risks and uncertainties. These risks, uncertainties and other factors include, but are not limited to, adverse general economic conditions, operating hazards, inherent uncertainties in interpreting engineering and geologic data, fluctuations in commodity prices and prices for operational services, government regulation and foreign political risks, fluctuations in the exchange rate between Canadian and US dollars and other currencies, as well as other risks commonly associated with the mining industry. Actual results may differ materially from those in the forward-looking statements and forward-looking information due to risks facing PolyMet or due to actual facts differing from the assumptions underlying its predictions.

In connection with the forward-looking information contained in this presentation, PolyMet has made numerous assumptions, regarding, among other things, that the geological, metallurgical, engineering, financial and economic advice that PolyMet has received is reliable and is based upon practices and methodologies which are consistent with industry standards, that PolyMet will be able to obtain additional financing on satisfactory terms to fund the development and construction of the NorthMet Project and that the market prices for relevant commodities remain at levels that justify construction and/or operation of the NorthMet Project. While PolyMet considers these assumptions to be reasonable, these assumptions are inherently subject to significant uncertainties and contingencies.

PolyMet's forward-looking statements are based on the beliefs, expectations and opinions of management on the date the statements are made, and PolyMet does not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations and opinions should change.

Specific reference is made to risk factors and other considerations underlying forward-looking statements discussed in PolyMet's most recent Annual Report on Form 40-F for the fiscal year ended December 31, 2018, and in our other filings with Canadian securities authorities and the U.S. Securities and Exchange Commission. PolyMet's financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS").

All amounts are in U.S. funds.



Cautionary Statements

The reserve and resource estimates included in this presentation were prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI43-101) and the Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves: Definitions and Guidelines.

Readers are referred to the technical report prepared under NI 43-101 for PolyMet entitled "NorthMet Project – Form NI 43-101 F1 Technical Report" dated March 26, 2018 ("2018 Technical Report") as filed under the Company's SEDAR and EDGAR profiles.

Proven & Probable Reserves are from Table 1 of November 19, 2019 PolyMet News Release. Measured, Indicated, Measured & Indicated, inclusive of Mineral Reserves, and Inferred resources are from Table 3 of that same news release. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

A copper price of \$2.93 per pound, a nickel price of \$6.50 per pound, a cobalt price of \$13.28 per pound, a palladium price of \$734 per ounce, a platinum price of \$1,286 per ounce, a gold price of \$1,263 per ounce and a silver price of \$19.06 per ounce was used to estimate mineral reserves at the NorthMet Project.

A copper price of \$3.30 per pound, a nickel price of \$8.50 per pound, a cobalt price of \$13.28 per pound, a palladium price of \$734 per ounce, a platinum price of \$1,286 per ounce, a gold price of \$1,263 per ounce and a silver price of \$19.06 per ounce was used to estimate mineral resources at the NorthMet Project.

Mineral reserves are estimated at an NSR cut-off of \$7.98 per ton inside of the final pit design which includes the estimated plant operating costs (including rail handling costs), all G&A costs and the water treatment costs during pit operation.

According to NI 43-101 definitions, a PEA implies a study that does or does not include an economic analysis of the potential viability of all mineral resources. NI 43-101 also states that an issuer may disclose the results of a preliminary assessment that includes or is based on inferred mineralized materials. For greater certainty, the pursuit of the expansion scenarios referred to herein would be subject to additional engineering and environmental review and permitting. The inferred mineral resources included in these expansion scenarios would have to be successfully converted to Measured and Indicated before any prefeasibility studies could commence. For greater certainty, the PEAs for these two upside cases are preliminary in nature, include inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the results of these preliminary economic assessments will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability and there is no certainty that mineral resources will become mineral reserves.

For a description of the key assumptions, parameters and methods used to estimate mineral reserves and resources, as well as data verification procedures and a general discussion of the extent to which the estimates of scientific and technical information may be affected by any known environmental, permitting, legal title, taxation, sociopolitical, marketing or other relevant factors, please see the: "2018 Technical Report".

The scientific and technical information contained in this presentation has been reviewed and approved by: Zachary Black, SME-RM, Hard Rock Consulting, Jennifer Brown, P.G., Hard Rock Consulting; Nicholas Dempers, Pr.Eng., SAIMM, Senet; Thomas Drielick, P.E. M3 Engineering; Art Ibrado, P.E. M3 Engineering; Erin Patterson, P.E., M3 Engineering; Thomas Radue, P.E., Barr Engineering Co.; Jeff S. Ubl, P.E., Barr Engineering Co.; and, Herbert Welhener, SME registered member, Independent Mining Consultants; who are all Independent Qualified Persons within the meaning of National Instrument 43-101 ("NI 43-101").



Executive Summary

First mover along world-class Duluth Complex

Permitted for construction and operations (subject to litigation)

Strong demand for our products

Low-cost, long-life operation with attractive economics

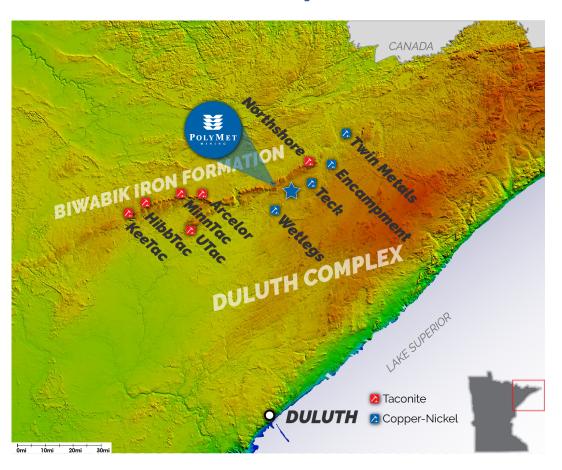
Significant expansion and exploration opportunities

Glencore is our principal partner, a premier global mining company





LocationDuluth Complex



World-class copper, nickel, PGM resources located in the Duluth Complex

District with 130 years of iron mining history

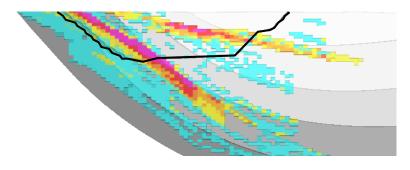
Experienced labor, construction and supplier networks

Established transportation and energy infrastructure

Strong community and elected officials support



Existing Assets







NorthMet Deposit ¹

Proven & Probable Reserve: 290Mt

Measured & Indicated Resource: 795Mt

Inferred Resource: 458Mt

Revenue distribution 2:

Cu 61%, Ni 18%, PGM 18%, Co 2%, Au 1%

Plant Site

Previously processed 100k tpd taconite

Primary crusher, ore transfer facilities and buildings will be refurbished

Installed industrial electric power

Tailings basin with over 300Mt capacity

Associated Infrastructure

Rail connecting mine and plant

Onsite access to class one rail carrier

Plentiful water sources

Established supplier network



Development

Phase I – Concentrate



Develop 225M ton ore body

LOM strip ratio 1.6

Refurbish existing plant facilities

Install new 40' SAG, ball and flotation circuit

Upgrade existing tailings basin

Produce copper and nickel concentrates

Phase II – Hydromet



Construct 1,000 tpd hydromet facility

Finance with operating cash flows

Improve metal recoveries

Value-added products

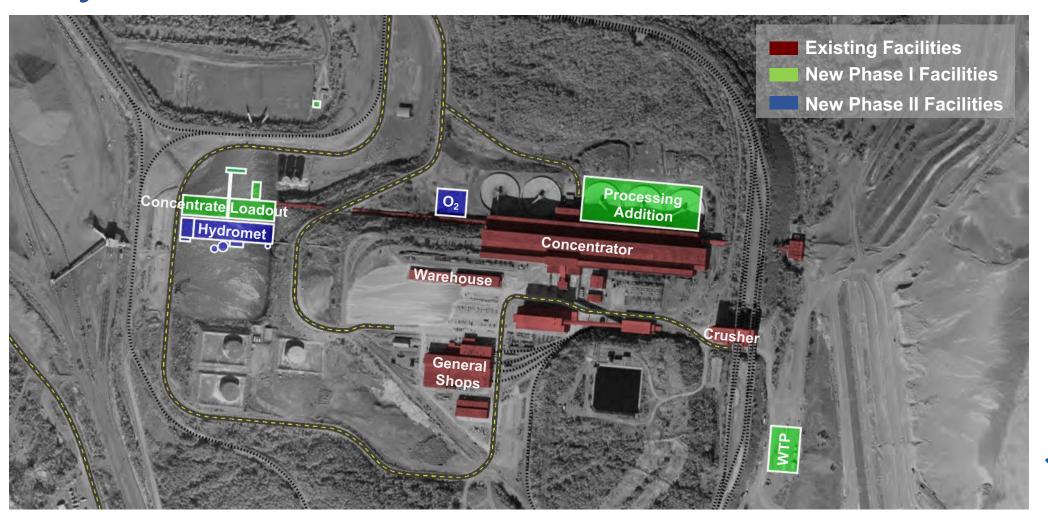
Nickel-cobalt hydroxide

PGM precipitate

Higher copper concentrate quality



Processing PlantLayout





ResponsibleMining

ENVIRONMENTAL STEWARDSHIP

Design safeguards water, air and other natural resources
Repurposes idled plant and addresses legacy water quality
Among highest EPA rating of EIS of any mine in U.S.

COMMUNITY COMMITTMENT

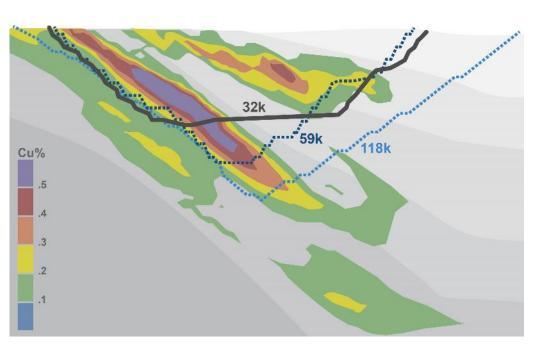
Vested partner in Iron Range communities

Aligned company and community values

Strong support across business, labor and community spectrum



NorthMetProduction Scenarios



Phase I	Permit	Opportunity ¹	Expansion ¹	
Mine life	20 yrs	15 yrs	19 yrs	
Mill feed ²	225m tons	293m tons	730m tons	
Processing rate	32k tpd	59k tpd	118k tpd	
Annual CuEq prod. 3	91m lbs	155m lbs	276m lbs	
Cash costs 4	106 c/lb	72 c/lb	85 c/lb	
Project capital	\$945M	\$1.1B	\$1.6B	
NPV ₇ / IRR	\$173M / 10%	\$751M / 18%	\$1.7B / 22%	
Phase I & II				
Annual CuEq prod. 3	106m lbs	180m lbs	310m lbs	
Cash costs 4	59 c/lb	23 c/lb	39 c/lb	
Hydromet capital	\$259M	\$259M	\$259M	
NPV ₇ / IRR	\$271M / 10%	\$963M / 19%	\$2.2B / 24%	

Source: "2018 Technical Report" as filed under the Company's SEDAR and EDGAR profile. Additional resource and reserve information is included on slide 17.

¹ Based on PEA level information and subject to further resource definition and environmental, permitting and engineering review.

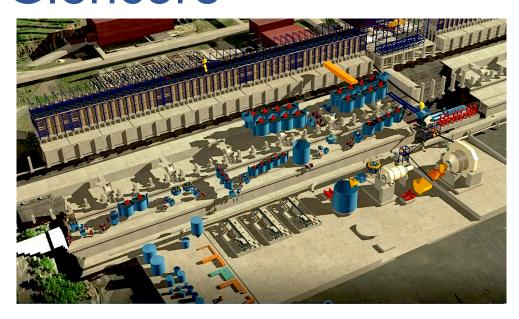
² Permit case is based on 225Mt proven & probable reserve. Opportunity and Expansion cases include measured & indicated resources, inclusive of reserves, and inferred material. Inferred mineral resources are considered too speculative geologically to have economic considerations applied that would enable categorization as mineral reserves, and there is not certainty the results will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability and there is no certainty that mineral resources will become mineral reserves.

³ Based on payable metal in copper and nickel concentrates and metal price assumptions of \$3.22/lb Cu, \$7.95/lb Ni, \$973/oz Pd, \$1128/oz Pt, \$20.68/lb Co, \$1308/oz Au.

⁴ Cash cost per pound of payable copper contained in concentrates, net of by-product credits.



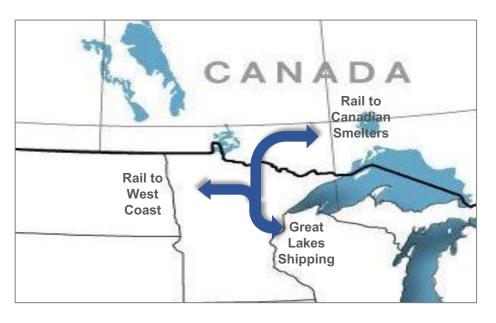
Principal Shareholder Glencore



Experts in mine and processing operations

Industry-wide support network

Global scale and marketing capabilities



Long-term source for Canadian smelters

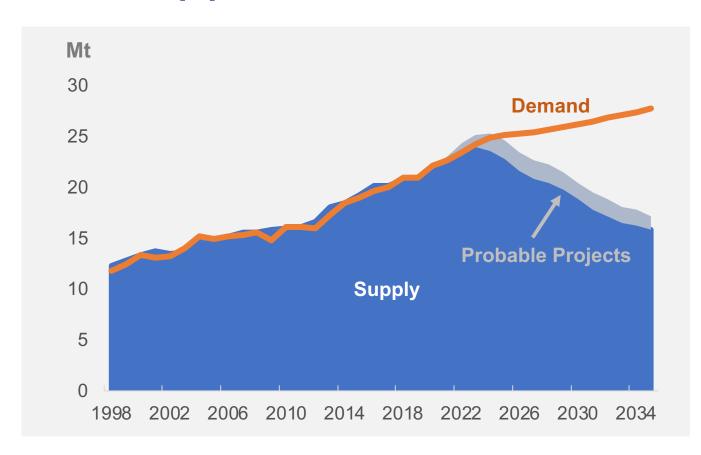
Geographically positioned for trading

Offtake agreement





Increasing Demand for Copper



Demand for mined output expected to exceed global production by 2024

Supply gap due to reserve depletion, falling head grades and long lead times

Global GDP growth at multi-year highs

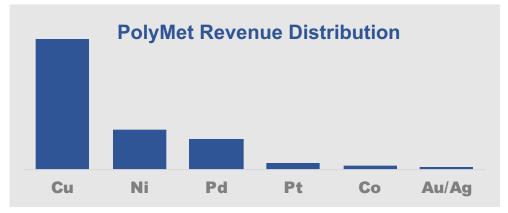
Chinese demand forecast to increase 14% in 5-year plan

Urbanization, electric vehicle growth and decarbonization fueling further demand



Clean & Renewable Energy Metals to support transformation





Meeting the EVI¹ target of 30 million electric vehicles by 2030

Generation and grid infrastructure

Grid storage

Charging infrastructure

Non-ICE vehicles

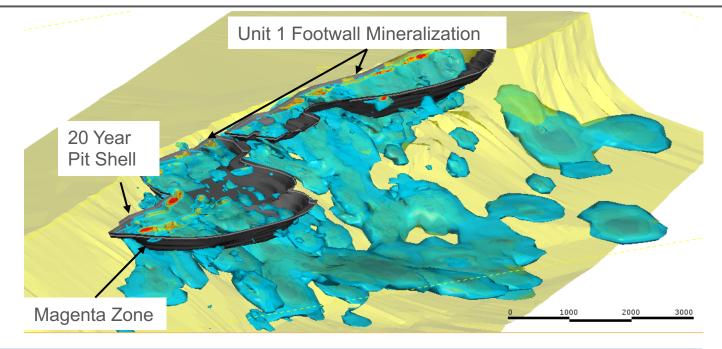
New metal requirement for 30 million electric vehicles ²

- 4.1Mt copper (18% of 2016 global supply)
- 1.1Mt nickel (56% of 2016 global supply)
- 314Kt cobalt (314% of 2016 global supply)





NorthMet Resource



Mineral Resource 1,2	Short Tons (Millions)	Copper (%)	Nickel (%)	Palladium (ppb)	Platinum (ppb)	Gold (ppb)	Cobalt (ppm)
Measured	351	0.240	0.073	221	64	33	71
Indicated	444	0.230	0.069	207	61	30	68
Measured & Indicated	795	0.234	0.071	214	62	31	69
Inferred	458	0.236	0.067	225	63	32	56
Proven & Probable 3	290	0.288	0.083	264	75	39	73.95

¹ See Table 3 of November 19, 2019 PolyMet News Release.

² Measured & Indicated resources are inclusive of Proven & Probable reserves. Additional information on Mineral Resources is included on slide 3.

³ See Table 1 of November 19, 2019 PolyMet News Release.

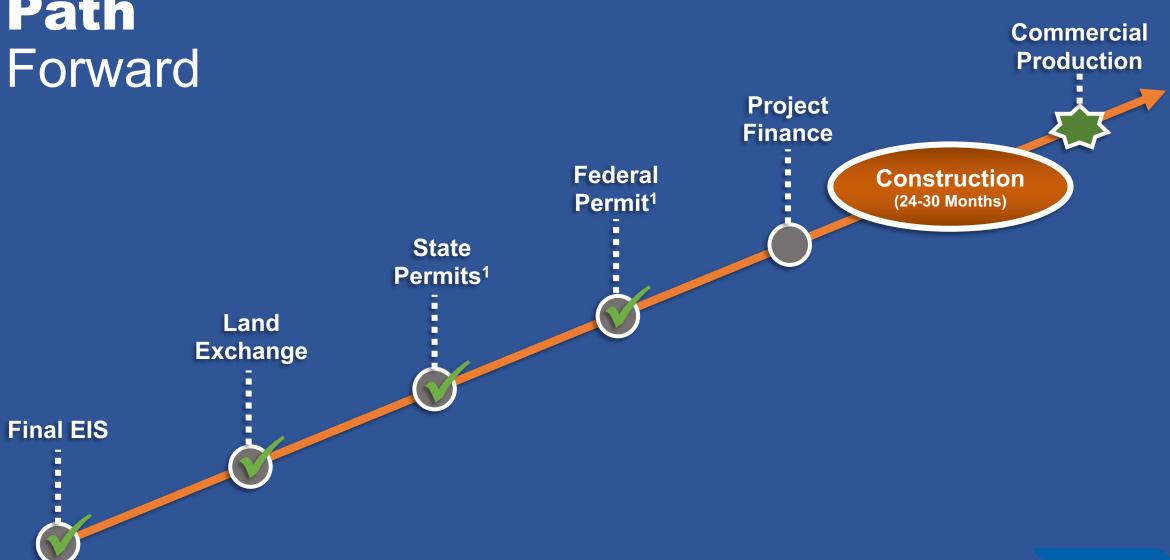


Exploration Potential Regional Opportunity Serpentine 1 Mesaba 1 Feet Undrilled up-dip exploration 2500 3750 5000 Wetlegs 1 potential to SW and NE of Pit



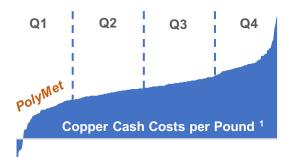


Path





ProjectHighlights



Attractive **Economics**

Robust demand for products

Timed to meet supply deficit

Long life, low cost asset



Expansion Opportunity

Existing infrastructure supports higher volumes

Mine plan represents 1/3rd of existing M&I resource

458M tons inferred material



Exploration Potential

High grade, near mine, legacy intercepts

Untested strike to NE and SW of ore body



First Mover in Duluth Complex

All key state and federal permits (subj. to litigation)

+6B tons of mineralized material in complex ²

Glencore Strategic Alliance







ExecutiveManagement



Jon Cherry
President & CEO

Leader in new mine development and environmental policy

Executive roles in 20year Rio Tinto career

Permitted and developed Eagle Mine

+25 years experience



Pat Keenan Chief Financial Officer

Extensive finance and executive leadership with major global mining operations

Finance executive at Rio Tinto and Newmont

+25 years experience



Richard Lock
Project Director

Extensive development and construction experience at major mining projects globally

Executive at Arizona Mining, Canadian Natural Resources Ltd, Diavik Diamond Mines

+25 years experience



Brad Moore
EVP Environmental &
Government Affairs

State and federal environmental permitting expert

Legislative and regulatory authority

+25 years public and private sector experience



Andrew Ware Chief Geologist

Authority on the Duluth Complex and Mid-Continent Rift

Principal geologist with Rio Tinto developing projects in SE Asia and the Americas

+25 years experience



Capital Structure

Shares Outstanding (TSX: POM, NYSE American: PLM)	1,005 million		
Market Capitalization	US\$251.25 million		
Fully Diluted Shares ¹	1,066 million		
Cash ¹	US\$14.9 million		
Stock Price (Dec-31-2019)	US\$0.25		
Stock Price (52-week range to Dec-31-2019)	US\$0.23 - US\$0.83		

¹ As at September 30, 2019; all other categories as at December 31, 2019