

#### • OSISKO METALS

Pine Point: Canada's Leading Zinc-Lead Project January 2022

> TSXV: OM OTCQX: OMZNF FRANKFURT: 0B51

#### Forward-Looking Statements & Cautionary Notes Regarding Technical Information



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Reference to historical production in the vicinity of Osisko Metals properties in this Presentation does not imply that any future mineral resources or discoveries will be of economic viability, nor does it imply that additional discoveries will be made.

#### PRELIMINARY ECONOMIC ASSESSMENT

This PEA was prepared for Osisko by BBA Inc, WSP Canada Inc. and other industry consultants, all Qualitied Persons ("QP") under National Instrument 43-101. The study was coordinated by the Company's Project Manager Annie Beaulieu P.Eng. and in collaboration with the Osisko Gold Royalties Technical Services Group. The QPs have reviewed and approved the content of this press release. Independent QPs include:

Colin Hardie, P.Eng., Pierre-Luc Richard, P. Geo. (BBA)

Hugo Latulippe, P.Eng., Eric Poirier, P. Eng. (WSP)

#### QUALIFIED PERSON

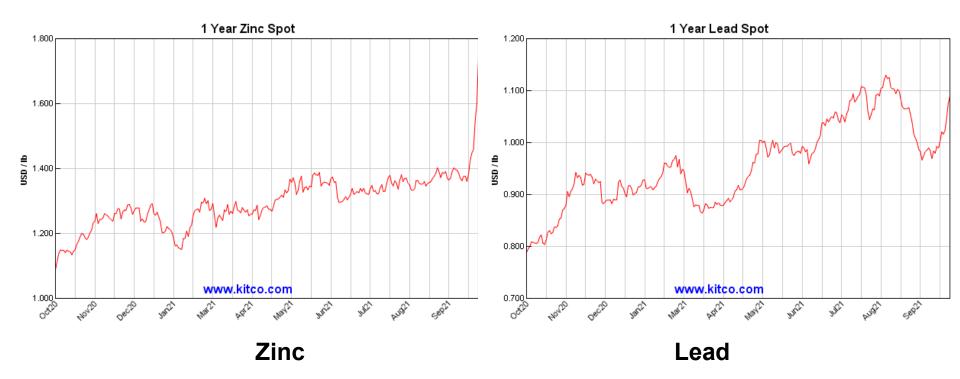
The scientific and technical information contained in this Presentation has been reviewed and approved by Robin Adair, P.Geo. VP Exploration of Osisko Metals, a "Qualified Person" within the meaning of National Instrument 43-101 – Standards for Disclosure of Mineral Projects.

## Key Take-Aways



- Decades-long divestment from resource sector has led to global base metal reserve depletion.
- Shift toward a green, sustainable economy coupled with post-COVID infrastructure stimulus will dramatically increase global base metal demand.
- Zinc is particularly exposed to medium-term supply deficits and OM is well positioned to develop one of Canada's best zinc-lead projects – the Pine Point project in NWT, Canada.
- Pine Point PEA (US\$1.15/lb Zn):
  - > NPV of C\$500M and IRR of 29.6% (After-Tax)
  - Payback of 2.8 years, based on CAPEX of C\$555M
  - Average annual production of 327Mlb Zn and 143Mlb Pb
  - Clean, high-grade concentrates by global standards

Zinc prices have remained robust since the start of 2021



The last 6 months have seen the strongest zinc and lead prices since the zinc bull market of 2017. Major disconnect between equity and commodity pricing...

#### Metal commodity valuations at 100-year lows





Historical low reached in late 2015 and repeated in March 2020

#### ....and demand is forecasted to rapidly grow



#### GOAL OF 2050 NET ZERO EMISSIONS WILL SHAPE OUR FUTURE Decarbonising energy demand ... ... needs significant metals supply growth ... Forecast commodity demand under a Rapid Transition 1.5°C pathway 5.0 Billion tonnes Market size(1) oil equivalent 13ktpa cobalt 2019=100 225ktpa nickel annual average annual average 2020F Forecast fossil fuel 450 growth rate growth rate 4.5 required demand under a Rapid required 2050F: 2010-2019: 7ktpa 2010-2019: 111ktpa Transition 1.5°C pathway<sup>(1)</sup> 507Mt 2030F 400 2050F: 4.0 92Mt 1.0Mtpa copper 3.7x 350 annual average 3.5 growth rate 523ktpa zinc annual average required 2010-2019: 0.5Mtpa growth rate 2040F 300 required 3.0 2010-2019: 262ktpa 2.5 2050F 2050F: 28.8Mt 60.1Mt 200 2.0 2.0x 2.1x 2050F 150 1.5 2019: 2019: 2019: 2019: 2.5Mt 29.6Mt 129kt 13.9Mt 100 1.0 50 0.5 0 0.0 Nickel Cobalt Zinc Copper Oil Coal Gas

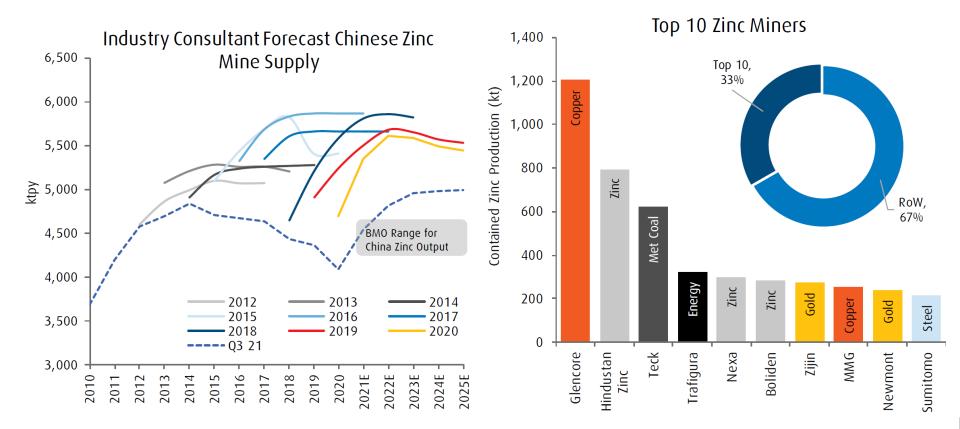
#### Notes:

(1) Glencore modelled estimates under a Rapid Transition (IEA SDS) scenario (+1.5°c). (2) Glencore modelled annual average change in demand from 2020 to 2050 under a Rapid Transition (IEA SDS) scenario (+1.5°c). Refer slides 43, 44 and 45 of the Investor Update 2020 – 4 December 2020. Copper demand

Glencore 2020 Preliminary results

#### No Savior for the Zinc market...



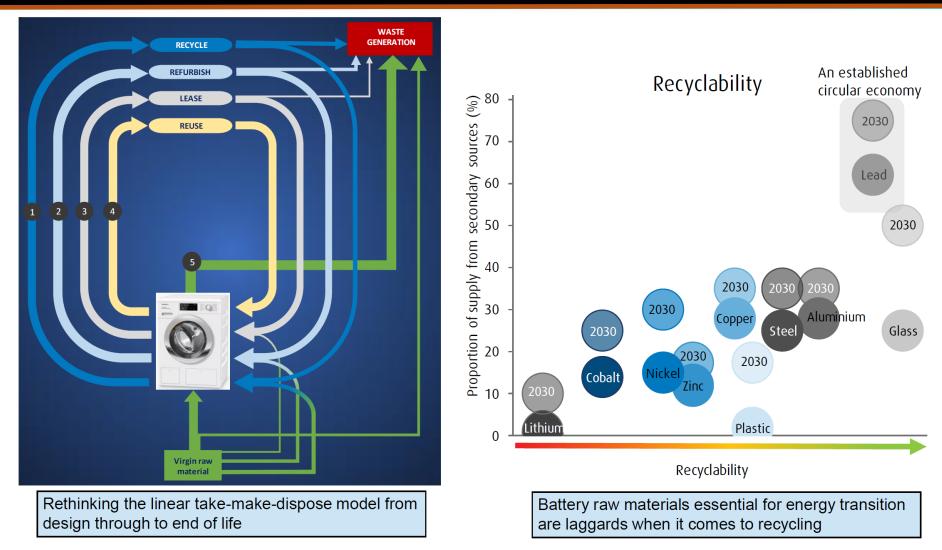


Lack of investment in Zinc markets both in China and ROW will result in long-term supply issues

Source: Wood Mackenzie and BMO Capital Markets

#### Recycling won't be the answer for Zinc





1 Copper wiring, plastic (pipes, tubes, door, pumps, detergent drawers),

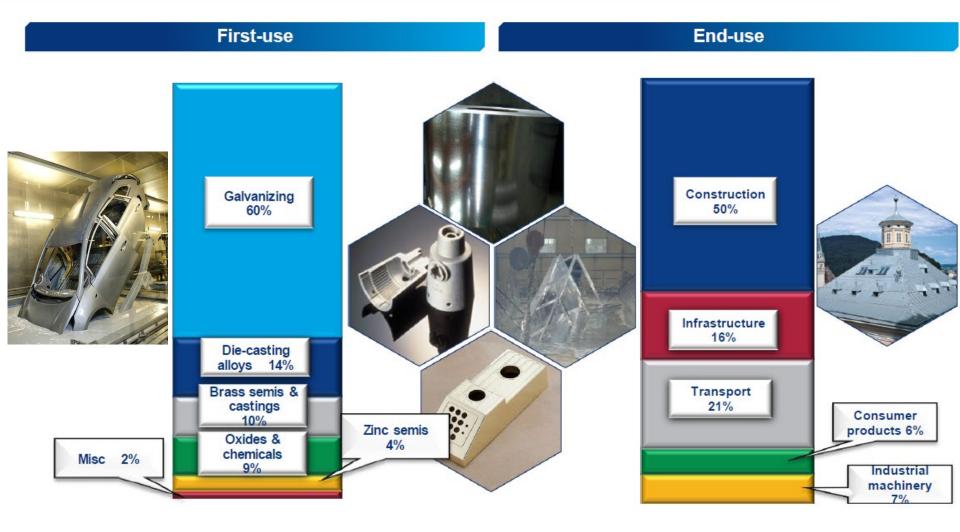
2 Stainless steel outer casing and drum can be re-manufactured with often homogenous sizing and little corrosion, aluminium transmission

3 Return to manufacturer / service provider who will reuse all salvageable parts

Source: Ellen Macarthur Foundation, BMO Capital Markets

# Construction and infrastructure stimulus will further drive the demand for zinc





### Galvanization = Sustainability





#### Looking to the future: Zinc-Air and Zinc-Hybrid Flow Batteries for energy storage

ZINC8





Renewable Energy Sources Face Storage and Distribution Issues

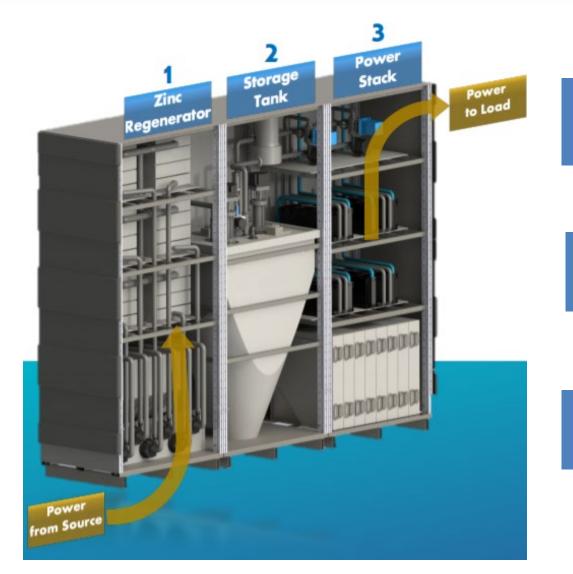
Lithium Batteries too Costly for Grid Storage

Lithium Supply Will Be Absorbed by Transportation

Zinc Battery Grid Storage is Low Cost and Efficient

Potential for Rapid Demand Growth Over Coming Years Looking to the future: Zinc-Air and Zinc-Hybrid Flow Batteries for energy storage







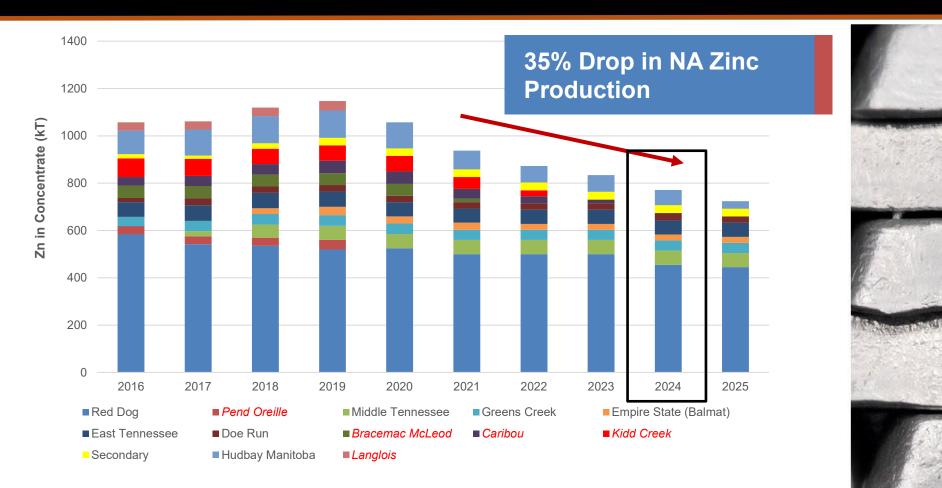
#### Low Cost And Safe

Durable With No Power Fade Over Extensive Lifetime

#### Well Established Technology

### North American zinc supply deficit is coming

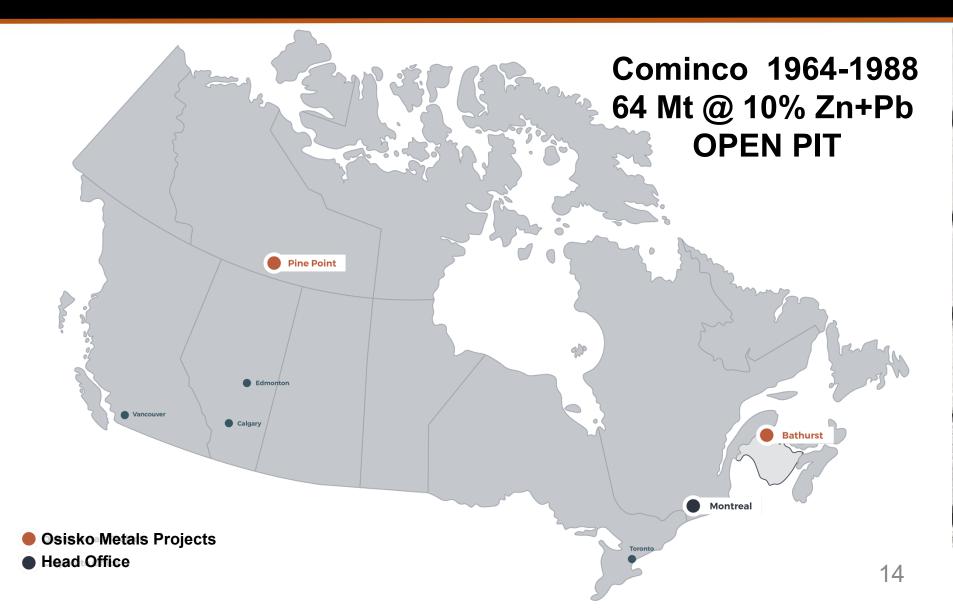




- Supply gap to re-appear within the next 2 years
- North American mine production: 35% drop expected in 4 years. This is similar to the global trend.

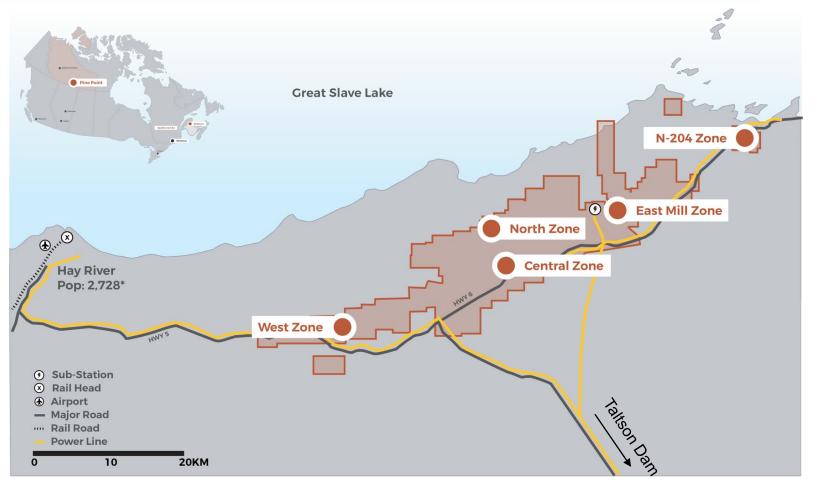
#### The Pine Point mining camp





### Support infrastructure already in place





- CN Rail Head, Highway and Flights from Edmonton to Hay River
- Property within 60 km of Hay River
- Paved Highway from Hay River to Site.
- Low-Cost Hydro-Electric Power Available 15
  On Site From Taltson Dam.

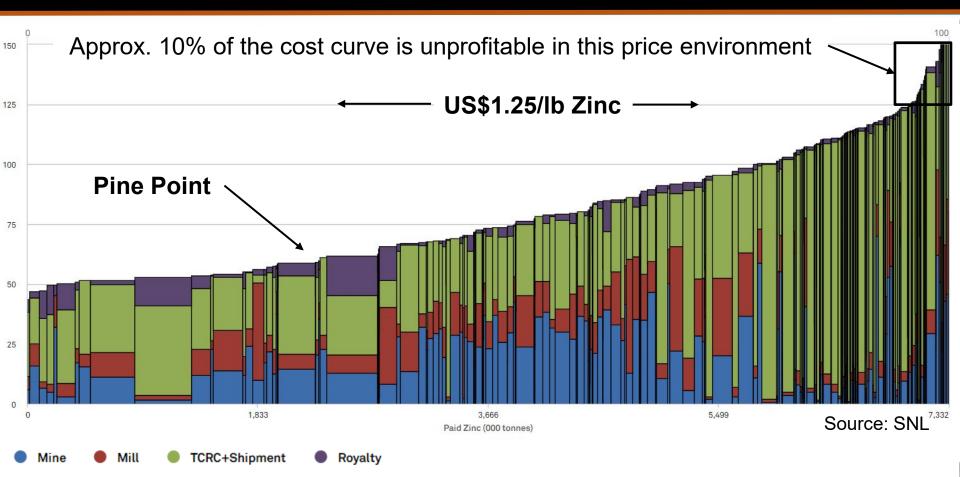
# Access to international concentrate markets via rail from Hay River





#### Global cost curve for zinc producers





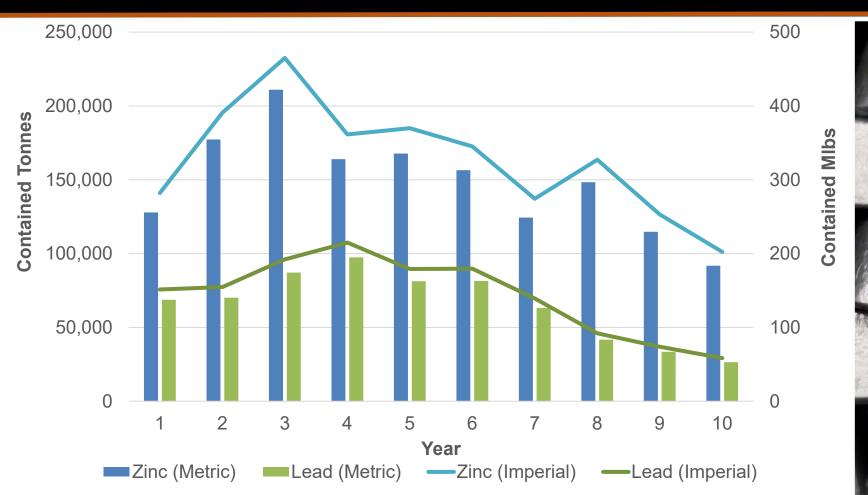
#### Pine Point PEA : Expected C1 cost of US\$0.67/lb

Potential to be within the second cost quartile on a cash cost/lb basis

Well positioned on the cost curve relative to current producers.

# Annual production of zinc: potential to be top-ten global producer

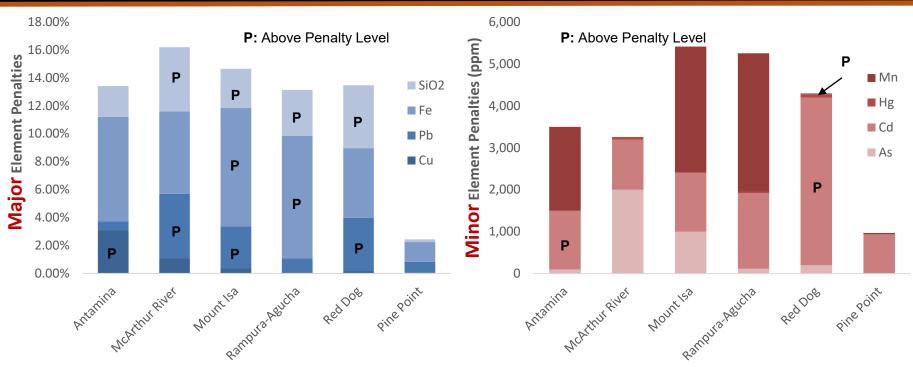




Sourced from 39 open pits and 8 high grade deposits mined by shallow underground methods from the West and Central Zones.

# Pine Point could produce one of the cleanest concentrates globally





#### Lead & Zinc Concentrates: Premium Quality, High Grade and Clean

- High recoveries for both zinc and lead (87% and 93%) using XRT sorting and conventional grinding and flotation processes
- High concentrate grades: Zinc (59%) & Lead (64%). Low deleterious elemental content

#### No smelter penalties expected

Assumptions: Major Element Penalties is Fe+Cu+Pb+SiO2; Minor Element Penalties is As + Cd + Mn + Hg Source: Wood Mackenzie & NR dated August 7<sup>th</sup> 2019

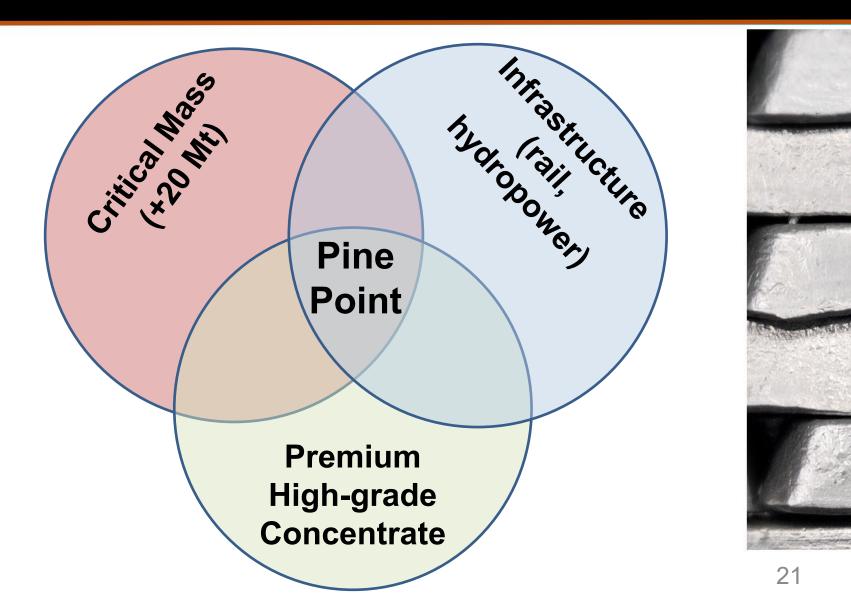
# Positive PEA outlines potential for significant zinc and lead production at Pine Point



- NPV of C\$500M and IRR of 29.6% (After-Tax)
  - Potential To Be Top-10 Global Zinc Mine On Production Basis
  - Potential to produce Premium High Grade Zinc Concentrate
- Infrastructure In Place:
  - Hydroelectric Power Substation Located on Site
  - Rail Access Within 60km
  - Paved Road to Site and ~100km of Haul Roads on Site
- Opportunities To Enhance PEA (updated PEA in Q1 2022):
  - Resource expansion laterally along open pit-constrained boundaries of deposits;
  - Metallurgical testing and material sorting optimization to enhance recoveries and increase the sorted coarse material fraction;
  - Hydrogeological studies to quantify and reduce water management costs

#### Pine Point Leading North American Zinc Development project





# MRE confirms potential for further resource expansion

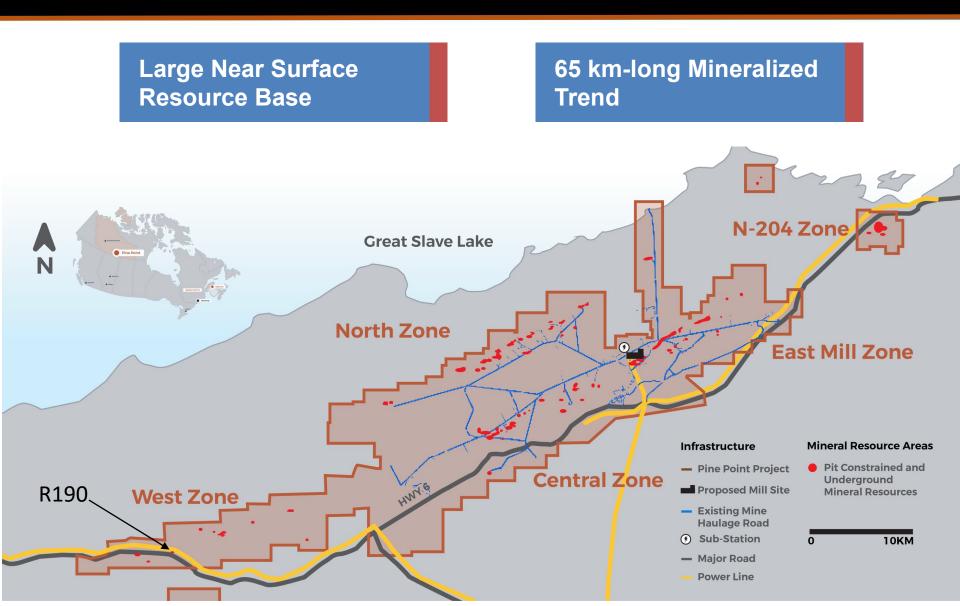


			Indicated			Inferred				
Method	Zone	Cut-off Grade (ZnEq %)	Tonnage (kt)	ZnEq (%)	Pb (%)	Zn (%)	Tonnage (kt)	ZnEq (%)	Pb (%)	Zn (%)
	Central	1.85	1,700	7.31	1.71	5.61	3,200	7.89	2.02	5.86
Pit Constrained	East Mill	1.85	6,000	5.38	1.39	4.00	3,800	5.05	1.02	4.03
Resources	North	1.90	5,300	6.98	2.12	4.86	10,800	5.70	1.64	4.06
	N-204	2.05	-	-	-	-	9,400	4.58	0.99	3.59
Underground Resources	Central	5.00	-	-	-	-	2,300	7.38	1.58	5.80
	West	5.00	-	-	-	-	8,200	11.04	3.78	7.25
Total Pit Constrained		1.85 - 2.05	12,900	6.29	1.73	4.56	27,200	5.48	1.37	4.11
Total Underground		5.00	-	-	-	-	10,500	10.23	3.30	6.93
Total Combined			12,900	6.29	1.73	4.56	37,600	6.80	1.91	4.89

- MRE within a total of 47 deposits of which 11 remain open along strike. Key focus of 2021-2022 drilling campaigns.
- Drilling in the East Mill Zone successfully pushed pit boundaries, demonstrating an opportunity to connect neighboring pit and reduce strip ratio.
- 25% of the total Resource tonnage at Pine Point is now in the Indicated category. Additional drilling will rapidly upgrade Inferred portions of the MRE.

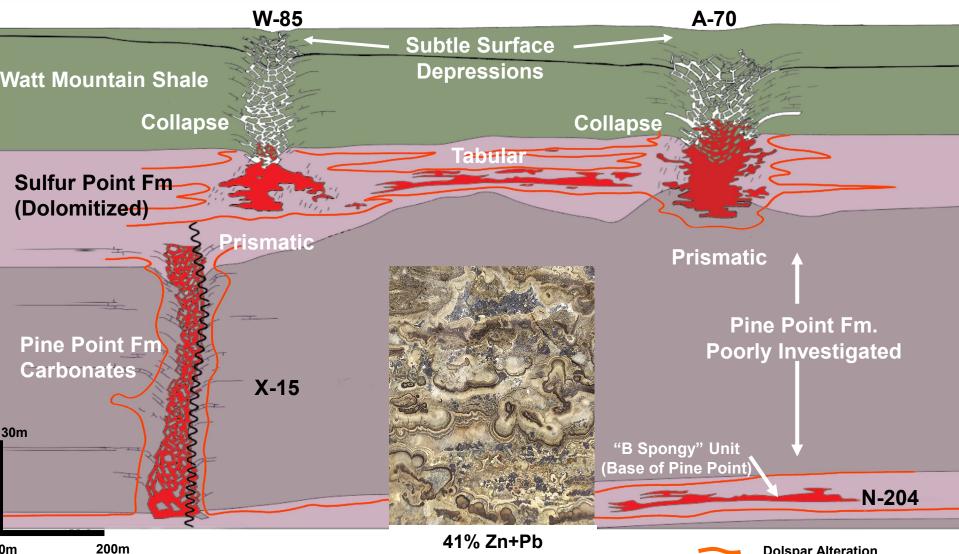
#### Project boundary location





### Deposit styles at Pine Point (MVT type)



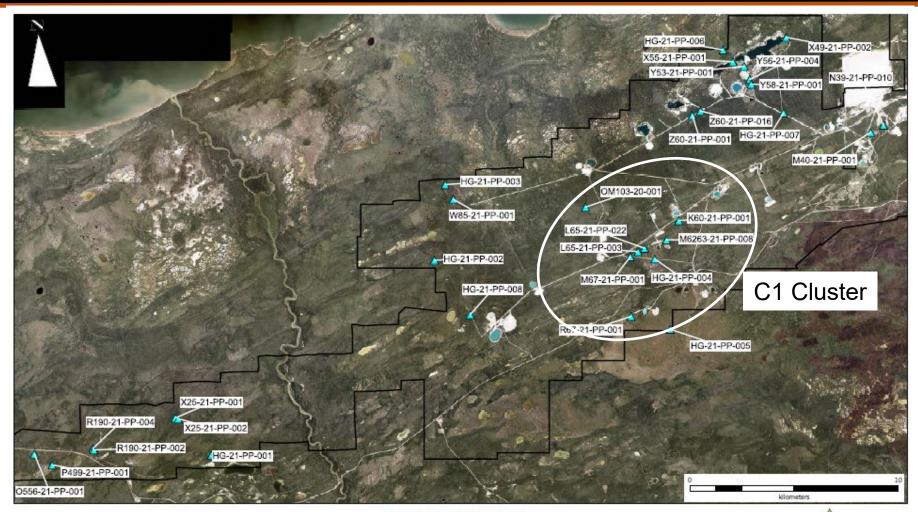


**Mineralization** 

**Dolspar Alteration** 

## New hydrogeological model is significant de-risking milestone





Hydrology Test Holes
 Mineral Rights Area

Pine Point Project Hydrology Test Hole Locations Orthophoto Base Map October, 2021



### Leveraging the hydrogeological model

A first for Pine Point – Providing unparallel insight into dewatering requirements

- Water inflow reduced by 46% when using new hydrogeological model in C1 cluster.
- Combined with high efficiency cluster mining technique, aggregate reduction of 63% of inflow rates.

The 2020 PEA included over \$370M in LOM dewatering cost (OPEX and
Sustaining CAPEX). Significant opportunity to drastically reduce
dewatering cost in updated PEA planned for Q1 2022.

Open Pit	Individual Inflows	Inflows Current HRI Study		
	2020 PEA (m <sup>3</sup> /d)	(m <sup>3</sup> /d)		
M67	100,000	103,860		
J68	235,000	72,879		
K68	290,304	96,950		
L65UG	110,000	129,390		
Total	735,304	403,079		





### Pine Point Agreements Provide Community Support

- In 2019, Osisko Metals announced two separate Collaboration Agreements with indigenous communities located near the Pine Point Project:
  - Deninu K'ue First Nation
  - Northwest Territory Metis Nation
- In 2017, Exploration Agreement signed with K'atl'odeeche First Nation
- **Collaboration Agreements** promote a cooperative relationship related to exploration and development activities at Pine Point.
  - The Agreements support education, training, employment, business and contracting opportunities.
  - Information sharing, site visits and broad outlines of topics for future agreements, including IBA's, are also included.



### Share Structure and BOD



CDPQ Management & Insi					
Shares	Board of Directors	Non-independents:			
Outstanding 201,833,440	Independents:	Robert Wares, Chairman & CEO			
Options	Amy Satov, LLB, Director	Jeff Hussey, P.Geo, President & COO			
13,742,566	Cathy Singer, LLB, Director				
Warrants 9,315,125	Don Siemens, CPA, Director				
Fully Diluted 214,391,682	Luc Lessard, P. Eng, Dire	ctor			





- Base metal markets are at relative 100-year lows.
- Shift toward a green, sustainable economy coupled with post-COVID infrastructure stimulus will dramatically increase global base metal demand.
- Zinc production deficit looming as mines close and only handful of zinc development projects are in the global pipeline.
- Pine Point has potential to become one of Canada's best zinclead mines that would produce a premium zinc concentrate.
- Pine Point PEA : NPV of C\$500M and IRR of 29.6% (after-tax).
- 2021 focus is on resource expansion, brownfield exploration and infill drilling, water management de-risking and environmental assessment; updated PEA March 2022 29

#### Metal Resource Investment is Coming Back!



"Our global industry will need to SIGNIFICANTLY INCREASE THE SUPPLY OF VARIOUS RAW MATERIALS

Ivan Glasenberg, CEO of Glencore, February 2021

*"By 2030, more than half of passenger cars will be electric. To meet this demand, global battery manufacturing capacity will need to double every two years."* 

Teck Climate Change Outlook, July 2021

"You have had a structural under-investment in supply. It's not just oil, it's metals, mining, the entire old economy has shortages in investment – what is coming we call the Revenge of the Old Economy". Jeffrey Currie, Global Head of Commodities, Goldman Sachs December 2020 Contacts



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## OSISKO METALS

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### Appendix - PEA Financial Overview



Internal Rate of Return ("IRR") After Taxes	29.6%
After-tax Net Present Value ("NPV") (Discount Rate 8%)	\$500M
After-Tax Payback Period (Years)	2.8
Pre-Production CAPEX (including \$71.2M Contingency)	\$555M
Average Annual LOM Production Zinc	327MIb
Average Annual LOM Production Lead	143MIb
Life of Mine ("LOM")	10 Years
Total Mineralized Material Mined	39.1Mt
Average Diluted (12%) ZnEq Grade	6.17%
Gross NSR Revenue After Royalty (LOM)	\$4,371M
After-tax Operating Cash Flow (LOM)	\$1,064M
C1 Costs over LOM (ZnEq)	US\$0.67/lb
Estimated All-In Costs (Total CAPEX plus OPEX, ZnEq)	US\$0.82/lb
LOM Zinc Price	US\$1.15/lb
LOM Lead Price	US\$0.95/lb
FX Rate (CAD:USD)	1.31

