

# lundin mining

Bank of America 2022 Global Metals, Mining & Steel Conference

May 17<sup>th</sup> – 19<sup>th</sup>, 2022



# Cautionary Statements

## Caution Regarding Forward-Looking Information and Non-GAAP Performance Measures

Certain of the statements made and information contained herein is “forward-looking information” within the meaning of applicable Canadian securities laws. All statements other than statements of historical facts included in this document constitute forward-looking information, including but not limited to statements regarding the Company’s plans, prospects and business strategies; the Company’s guidance on the timing and amount of future production and its expectations regarding the results of operations; expected costs; permitting requirements and timelines; timing and possible outcome of pending litigation; the results of any Preliminary Economic Assessment, Feasibility Study, or Mineral Resource and Mineral Reserve estimations, life of mine estimates, and mine and mine closure plans; anticipated market prices of metals, currency exchange rates, and interest rates; the development and implementation of the Company’s Responsible Mining Management System; the Company’s ability to comply with contractual and permitting or other regulatory requirements; anticipated exploration and development activities at the Company’s projects; the Company’s integration of acquisitions and any anticipated benefits thereof; and expectations for other economic, business, and/or competitive factors. Words such as “believe”, “expect”, “anticipate”, “contemplate”, “target”, “plan”, “goal”, “aim”, “intend”, “continue”, “budget”, “estimate”, “may”, “will”, “can”, “could”, “should”, “schedule” and similar expressions identify forward-looking statements.

Forward-looking information is necessarily based upon various estimates and assumptions including, without limitation, the expectations and beliefs of management, including that the Company can access financing, appropriate equipment and sufficient labor; assumed and future price of copper, nickel, zinc, gold and other metals; anticipated costs; ability to achieve goals; the prompt and effective integration of acquisitions; that the political environment in which the Company operates will continue to support the development and operation of mining projects; and assumptions related to the factors set forth below. While these factors and assumptions are considered reasonable by Lundin Mining as at the date of this document in light of management’s experience and perception of current conditions and expected developments, these statements are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking statements and undue reliance should not be placed on such statements and information. Such factors include, but are not limited to: risks inherent in mining including but not limited to risks to the environment, industrial accidents, catastrophic equipment failures, unusual or unexpected geological formations or unstable ground conditions, and natural phenomena such as earthquakes, flooding or unusually severe weather; uninsurable risks; global financial conditions and inflation; changes in the Company’s share price, and volatility in the equity markets in general; volatility and fluctuations in metal and commodity demand and prices; changing taxation regimes; delays or the inability to obtain, retain or comply with permits; reliance on a single asset; unavailable or inaccessible infrastructure, infrastructure failures, and risks related to ageing infrastructure; risks related to negative publicity with respect to the Company or the mining industry in general; health and safety risks; pricing and availability of key supplies and services; the threat associated with outbreaks of viruses and infectious diseases, including the COVID-19 virus; exchange rate fluctuations; risks relating to attracting and retaining of highly skilled employees; risks inherent in and/or associated with operating in foreign countries and emerging markets; climate change; regulatory investigations, enforcement, sanctions and/or related or other litigation; existence of significant shareholders; uncertain political and economic environments, including in Brazil and Chile; risks associated with acquisitions and related integration efforts, including the ability to achieve anticipated benefits, unanticipated difficulties or expenditures relating to integration and diversion of management time on integration; indebtedness; liquidity risks and limited financial resources; funding requirements and availability of financing; exploration, development or mining results not being consistent with the Company’s expectations; risks related to the environmental regulation and environmental impact of the Company’s operations and products and management thereof; activist shareholders and proxy solicitation matters; reliance on key personnel and reporting and oversight systems, as well as third parties and consultants in foreign jurisdictions; historical environmental liabilities and ongoing reclamation obligations; information technology and cybersecurity risks; risks related to mine closure activities, reclamation obligations, and closed and historical sites; social and political unrest, including civil disruption in Chile; the inability to effectively compete in the industry; financial projections, including estimates of future expenditures and cash costs, and estimates of future production may be unreliable; actual ore mined and/or metal recoveries varying from Mineral Resource and Mineral Reserve estimates, estimates of grade, tonnage, dilution, mine plans and metallurgical and other characteristics; ore processing efficiency; risks associated with the estimation of Mineral Resources and Mineral Reserves and the geology, grade and continuity of mineral deposits including but not limited to models relating thereto; enforcing legal rights in foreign jurisdictions; community and stakeholder opposition; changes in laws, regulations or policies including but not limited to those related to mining regimes, permitting and approvals, environmental and tailings management, labor, trade relations, and transportation; risks associated with the structural stability of waste rock dumps or tailings storage facilities; dilution; risks relating to dividends; conflicts of interest; counterparty and credit risks and customer concentration; the estimation of asset carrying values; challenges or defects in title; internal controls; relationships with employees and contractors, and the potential for and effects of labor disputes or other unanticipated difficulties with or shortages of labor or interruptions in production; compliance with foreign laws; potential for the allegation of fraud and corruption involving the Company, its customers, suppliers or employees, or the allegation of improper or discriminatory employment practices, or human rights violations; compliance with environmental, health and safety regulations and laws; and other risks and uncertainties, including but not limited to those described in the “Risk and Uncertainties” section of this AIF and the “Managing Risks” section of the Company’s MD&A for the year ended December 31, 2021, which are available on SEDAR at [www.sedar.com](http://www.sedar.com) under the Company’s profile. All of the forward-looking statements made in this document are qualified by these cautionary statements. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated, forecast or intended and readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking information. Accordingly, there can be no assurance that forward-looking information will prove to be accurate and forward-looking information is not a guarantee of future performance. Readers are advised not to place undue reliance on forward-looking information. The forward-looking information contained herein speaks only as of the date of this document. The Company disclaims any intention or obligation to update or revise forward-looking information or to explain any material difference between such and subsequent actual events, except as required by applicable law..

### Non-IFRS Measures

Lundin Mining has included certain non-IFRS measures in this document such as adjusted earnings, adjusted EBITDA, adjusted operating cash flow, free cash flow, net cash (debt), cash cost, and expansionary capital expenditures. Please see the Management’s Discussion and Analysis (“MD&A”) for the three months ended March 31, 2022, for discussion of non-GAAP measures and reconciliations, which information is incorporated by reference herein and which is available under the Company’s profile on SEDAR at [www.sedar.com](http://www.sedar.com). Lundin Mining believes that these measures, in addition to conventional measures prepared in accordance with International Financial Reporting Standards (“IFRS”), provide investors an improved ability to evaluate the underlying performance of Lundin Mining and Josemaria Resources and the proposed transaction. The non-IFRS measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. These measures do not have any standardized meaning prescribed under IFRS, and therefore may not be comparable to other issuers.

Note: All dollar amounts are in US dollars unless otherwise denoted.

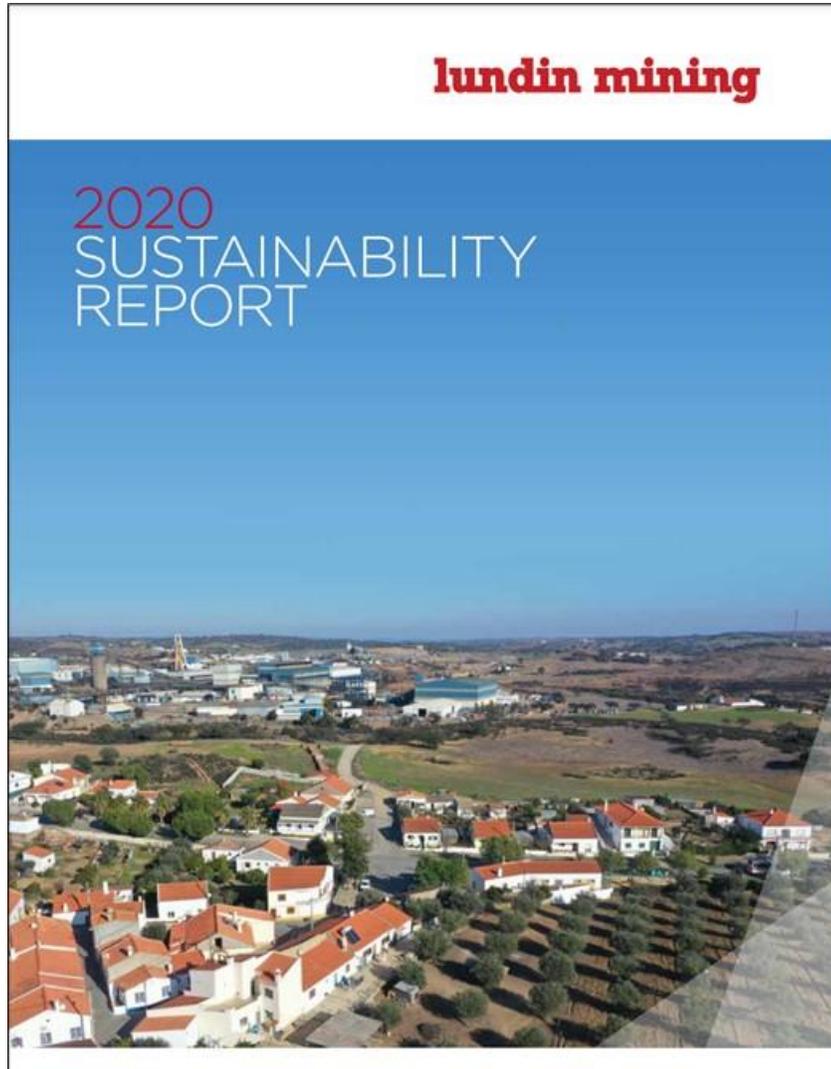
## Our Strategy

Operate, upgrade and grow a base metals portfolio that provides leading returns for our shareholders throughout the cycle

- copper dominant
- competitive cost position
- low-risk mining jurisdictions
- pipeline of exploration and development projects
- low leverage and flexible balance sheet
- attractive direct shareholder returns



1. Lundin Mining holds an 80% interest in Candelaria



- sustainability performance reported in a comprehensive, standalone document since 2010
- prepared in accordance with the Global Reporting Initiative (GRI) Standards and broadly mapped against the Sustainability Accounting Standards Board (SASB) Metals & Mining Standard
- continue to define, integrate and embed sustainability pillars, key themes, performance indicators and long-term targets

## 2020 Report Highlights



THROUGH OUR CORPORATE AND SITE CRISIS MANAGEMENT TEAMS, we worked proactively, following our Pandemic Response Plan and the guidance of local health authorities and the World Health Organization, to monitor the evolving pandemic and put measures in place to ensure the safety of our employees, contractors, communities and the Company.



SUPPORT PROGRAMS AND POSITIVE FEEDBACK FROM COMMUNITIES ACROSS SITES DUE TO COVID-19 RESPONSE.



Formal adoption of the Global Industry Standard on Tailings Management.



Evaluated and selected a standard methodology for monitoring community perception at our sites.



OUR HUMAN RIGHTS STANDARD WAS APPROVED IN 2020.



NO LEVEL 3 OR ABOVE ENVIRONMENTAL INCIDENTS AND A 13% DECREASE IN LEVEL 2 INCIDENTS.



We carried out global diversity and inclusion training and created the Diversity, Inclusion, Anti Racism and Discrimination Committee, a multi-disciplinary volunteer working group established to further Lundin Mining's diversity and inclusion agenda.

[www.lundinmining.com/responsible-mining/sustainability-reports/](http://www.lundinmining.com/responsible-mining/sustainability-reports/)

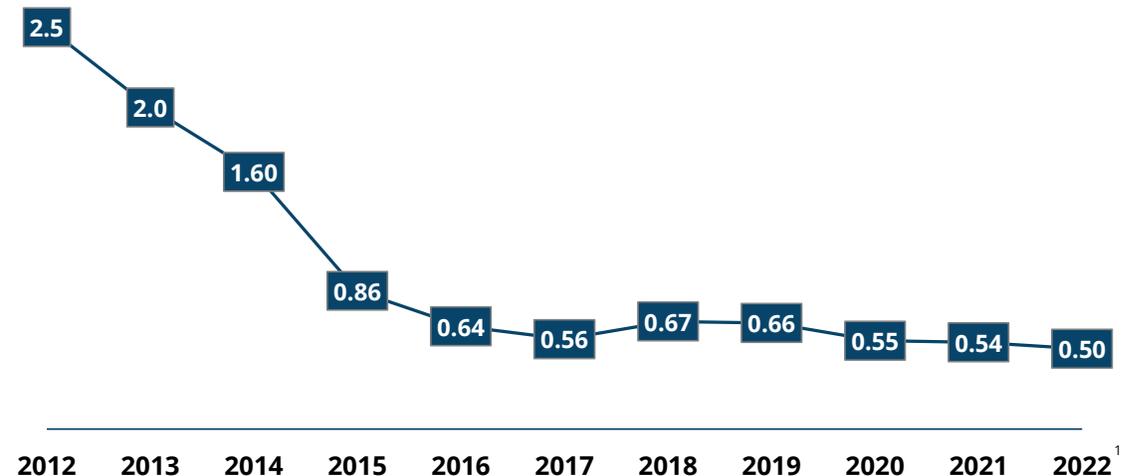
# Responsible Mining

- ✓ best-ever annual TRIF rate in 2021 of 0.54
- ✓ leading ISS Environment & Social Quality Scores
- ✓ CDP score of 'B', above industry and North American averages
- ✓ trend of decreasing energy intensity and GHG emissions intensity per tonne rock mined since 2016
- ✓ Scope 2 emissions benefit from Zinkgruvan's investment in 100% renewable electricity since 2017
- ✓ renewables increasing to a minimum of 80% of Candelaria's electrical energy mix commencing in 2023
- ✓ Candelaria's operational water requirements met through reuse and make-up water from owned sea water desalination facility



Zinkgruvan

## Total Recordable Injury Frequency per 200,000 person hours worked



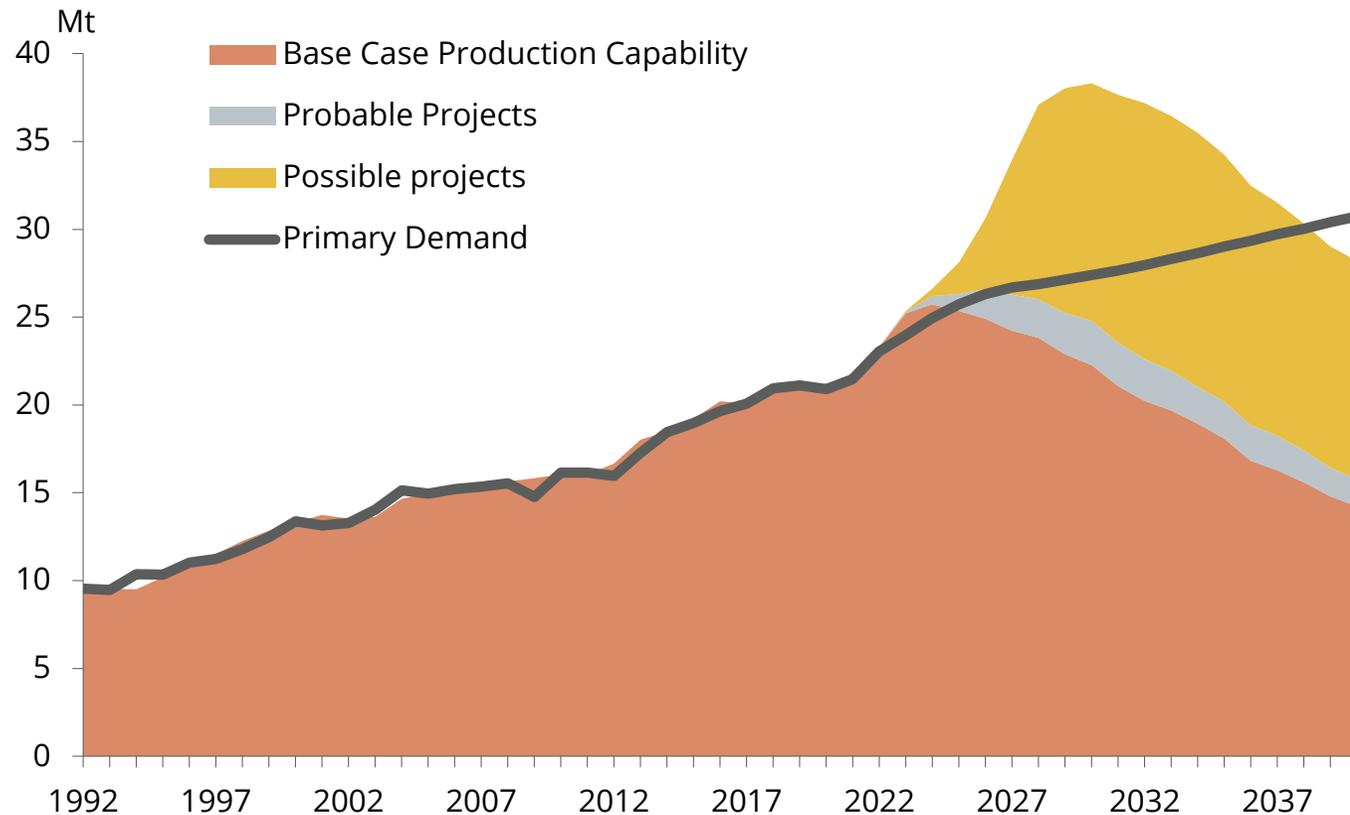
1. For the three-month period ended March 31, 2022



- committed to the Copper Mark assurance framework to promote the responsible production of copper
- Candelaria is Lundin Mining's first operation to sign up for the Copper Mark
- participation provides further assurance to our customers, shareholders and many additional stakeholders

# Copper is Vital to Society

- constructive demand and supply outlook for the base metals Lundin Mining produces
- positive copper outlook is largely driven by the metal's importance in the energy transition and inelastic mine supply
- demand expected to increase on the back of decarbonization and the 'greening' of the economy
- at the same time, mine production is forecast to decline with attrition and few advanced-stage projects to be developed in timely manner
- development timelines continue to extend with changing and challenging economic, political, and environmental global landscape
- structural deficit anticipated with a theoretical supply gap of 6.4 Mt by 2032<sup>1</sup> or nearly 25% of current consumption
- to maintain market balance, copper price needs to be supported at a higher than historic levels



Source: Wood Mackenzie - Q1 2022 - Global Copper Strategic Planning Outlook

# Q1/22 Summary Results



Neves-Corvo – zinc circuit new SAG mill – February 2022

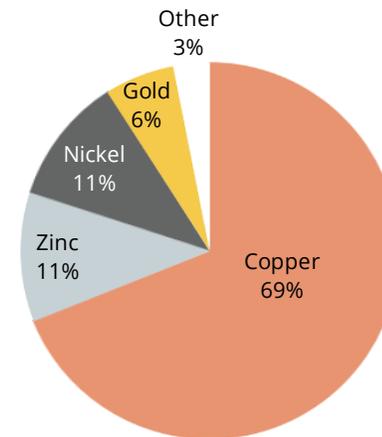
## Production

65,081 t of copper  
 32,391 t of zinc  
 34,000 oz of gold  
 4,281 t of nickel  
 7,521 t of lead

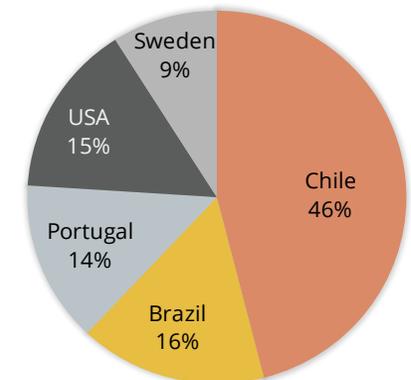
## Payable Sales

64,879 t of copper  
 27,504 t of zinc  
 36,000 oz of gold  
 3,267 t of nickel  
 5,607 t of lead

## Over \$990M in Sales



**By Metal**



**By Jurisdiction**

# Q1/22 Financial Highlights

<b>Realized Metal Prices<sup>1,2</sup></b>	<b>Q1/22</b>	<b>Q1/21</b>	<b>Δ</b>
Copper	\$4.94/lb	\$4.20/lb	18%
Zinc	\$1.96/lb	\$1.27/lb	54%
Gold	\$1,959/oz	\$1,598/oz	23%
Nickel	\$15.17/lb	\$7.79/lb	95%
<b>Summary Financial Results<sup>2</sup></b>	<b>Q1/22</b>	<b>Q1/21</b>	<b>Δ</b>
Revenue	\$991M	\$682M	45%
Gross Profit	\$479M	\$253M	89%
Attributable Net Earnings	\$345M \$0.47/sh	\$135M \$0.18/sh	156% \$0.29/sh
Adjusted Earnings	\$296M \$0.40/sh	\$144M \$0.20/sh	106% \$0.20/sh
Adjusted EBITDA	\$588M	\$354M	66%
Cash Flow from Operations	\$317M	\$159M	99%
Adjusted Operating Cash Flow	\$473M \$0.64/sh	\$280M \$0.38/sh	69% \$0.26/sh
Free Cash Flow	\$187M	\$56M	234%
Cash	\$734M	\$181M	\$553M
Net Cash (Debt)	\$705M	(\$8M)	\$713M

- revolving credit facility increased to \$1.75 billion and extended on April 26, 2022
- declared regular quarterly dividend of C\$0.09/sh on April 27, 2022

1. LUN average realized price, including impact of provisional price adjustments. Realized price for copper is inclusive of the impact of streaming agreements.

2. Realized metal price, Adjusted Earnings, Adjusted EBITDA, Adjusted Operating Cash Flow, Free Cash Flow and Net Cash (Debt) are non-GAAP measures. Please see Lundin Mining's MD&A for the three months ended March 31, 2022 for discussion on non-GAAP and other performance measures.

## Meaningfully Increasing Copper and Gold Growth Profile

- completed acquisition of Josemaria Resources Inc. April 28, 2022
- project received Environmental Social Impact Assessment April 11, 2022
- commercial agreements and securing of additional sectoral permits are ongoing
- progressing through basic engineering with an updated Technical Report targeted for completion in Q4/22
- updated Technical Report to include new Mineral Reserve and Resource estimates incorporating additional in-fill and development drilling
- study work is ongoing, including update of cost estimates to be reflective of current conditions and potential scope changes compared to previous plans
- initial capex estimate is expected to be greater than \$4 billion
- post-closing, Lundin Mining intends to spend up to \$300 million to advance the project ahead of a construction decision in H2/22



Josemaria Copper-Gold project camp construction, San Juan, Argentina – April 16, 2022

## Delivering on Plan

- Q1/22 production of 39,503 t of copper and approximately 22,000 oz of gold at cash cost<sup>1</sup> of \$1.58/lb of copper in-line with plan
- production to be modestly weighted to H2/22, primarily owing to grade profile
- inflationary impacts on mine consumables being largely offset by production volumes and by-product metal prices
- Q1/22 capex of US\$83M; trending above guidance with inflationary cost increases on capitalized stripping, including diesel and explosives

## Growth and Exploration

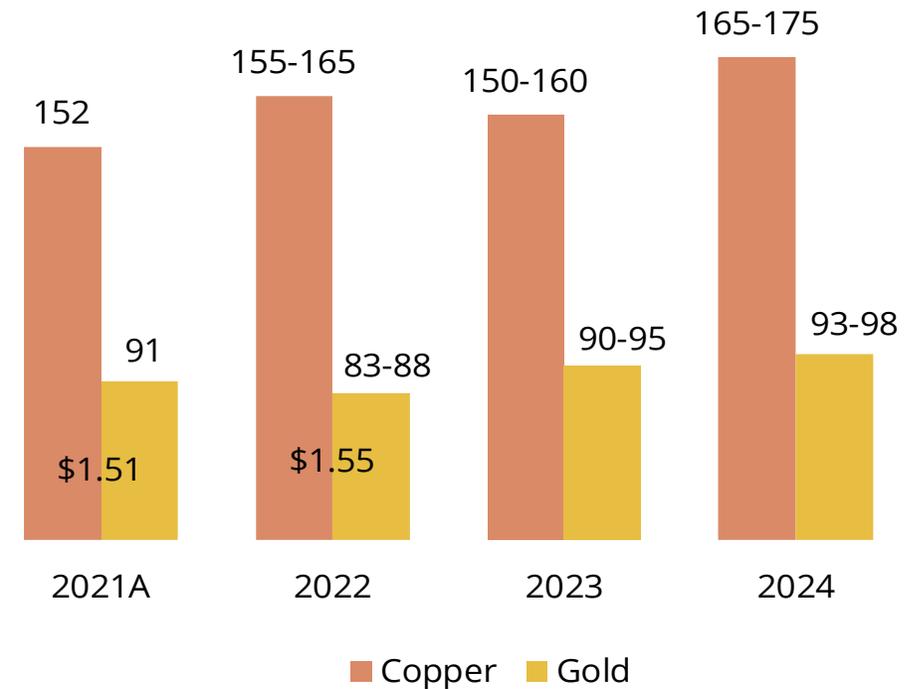
- debottlenecking of pebble crushing circuit advancing
- CUGEP Feasibility Study evaluating expansion of undergrounds to 26,000 tpd, from 14,000 tpd, complete
- four exploration rigs, primarily on UG targets
- completed 5,000 m of 54,000 m \$15M 2022 drill program



Candelaria Punta Padrones port and desalination plant

## Copper, Gold Production & Cash Cost Outlook<sup>2</sup>

(100% basis; kt Cu, koz Au & \$/lb Cu, net of by-product credits)



1. Cash cost is a non-GAAP and other performance measure. Please see Lundin Mining's MD&A for the three months ended March 31, 2022 for discussion on non-GAAP and other performance measures.

2. Copper and gold production and cash cost guidance for 2022 is as most recently disclosed in Lundin Mining's MD&A for the three months ended March 31, 2022. Guidance for 2023 and 2024 is as announced by news release entitled "Lundin Mining Provides Operational Outlook & Update" dated November 22, 2021. Currently, 68% of Candelaria's total gold and silver production is subject to a streaming agreement and as such 2022 cash cost guidance is based on receipt of \$420/oz and \$4.20/oz on the streamed portion of gold and silver sales, respectively.

## Q1/22 Impacted by Significant Rainfall and Omicron Wave

- Q1/22 production of 10,100 t of copper and 12,000 oz of gold at a cash cost of \$1.82/lb of copper
- mining activities and ore release were impacted by abnormally heavy rains and COVID related absences which necessitated a greater proportion of mill feed sourced from the stockpile
- opportunities to increase waste stripping to improve ore availability and production are being evaluated as it is currently trending below annual guidance
- Q1/22 cash cost in line with plan though trending above annual guidance considering inflation on consumable prices, strengthening BRL and anticipated production volumes
- first quarter capex of US\$15M; capex trending above guidance with inflationary cost increases on capitalized stripping, including diesel and explosives

## Exploration & Expansion Studies Advancing

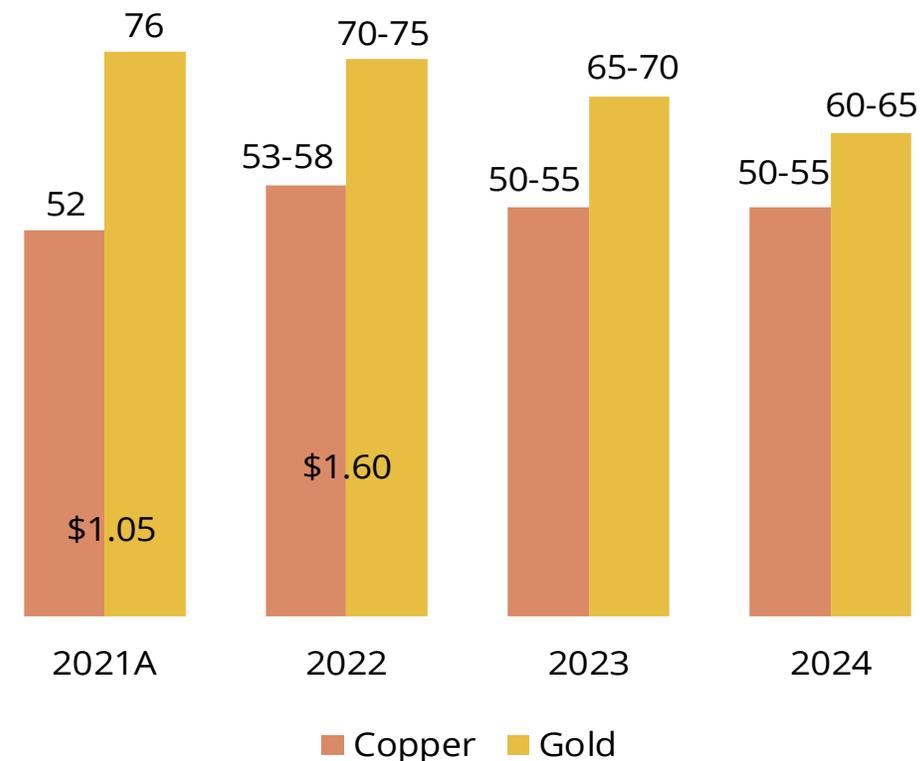
- expansion studies to approximately 32 Mtpa ongoing
- exploration drilling ahead of plan with 15,000 m completed in Q1/22
- over 10,000 m completed on Saúva this year in 27 holes
- mineralized area has increased to approximately 1,000 m by 750 m and remains open in all directions



Chapada processing plant

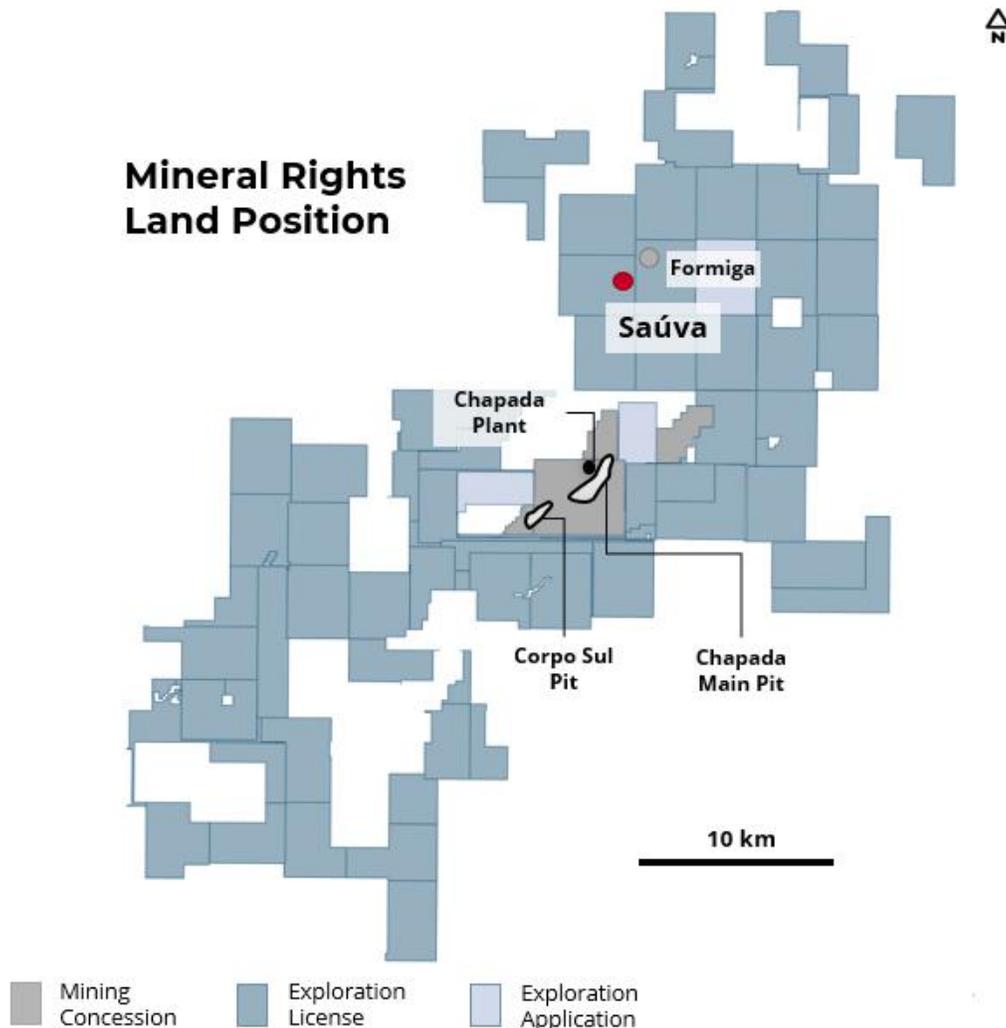
## Copper, Gold Production & Cash Cost Outlook<sup>1</sup>

(100% basis; kt Cu, koz Au & \$/lb Cu, net of by-product credits)



1. Copper and gold production and cash cost guidance for 2022 is as most recently disclosed in Lundin Mining's MD&A for the three months ended March 31, 2022. Guidance for 2023 and 2024 is as announced by news release entitled "Lundin Mining Provides Operational Outlook & Update" dated November 22, 2021. Chapada's cash costs are calculated on a by-product basis and do not include the effects of its copper stream agreements. Effects of the copper stream agreements are reflected in copper revenue and will impact realized price per pound.

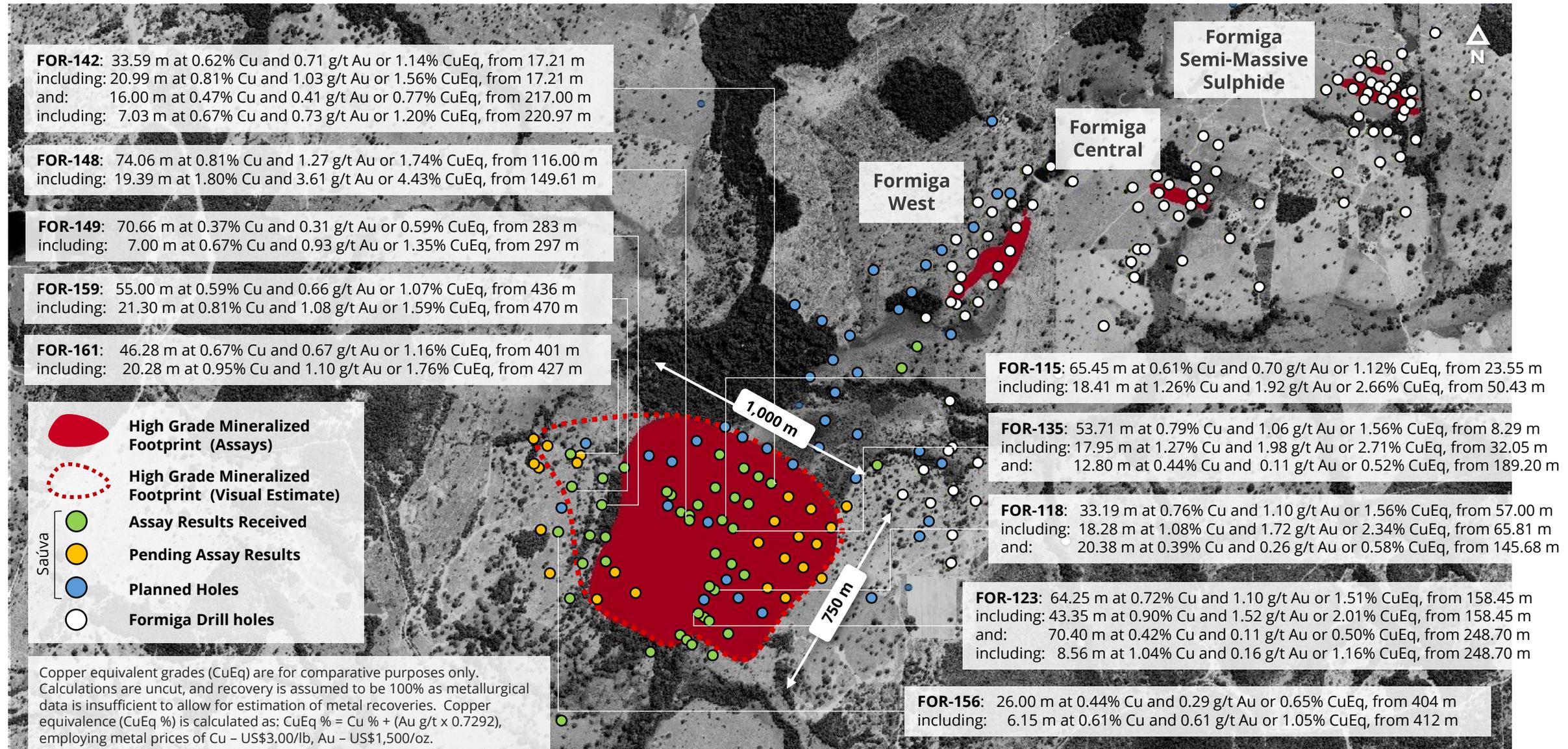
# Copper-Gold Saúva Discovery at Chapada<sup>1</sup>



- located approximately 15 km north of Chapada mine
- exploration concession was prioritized and acquired in 2021 federal auction process
- first two drill holes confirmed presence of shallow high-grade copper-gold mineralization
- nearly 23,200 m of drilling completed in 70 drill holes with assay results received from 46 holes through mid-April 2022
- current mineralized area measures approximately 1,000 m by 750 m and remains open in all directions
- presently five rigs testing areas to the north, west and south of the discovery area
- aggressive and methodical exploration of the sector planned for 2022 as part of the \$10 million exploration program

1. Refer to news release "Lundin Mining Announces New Copper-Gold Saúva Discovery at Chapada" dated February 10, 2022.

# Saúva Copper-Gold System<sup>1</sup>



1. Refer to news release "Lundin Mining Announces New Copper-Gold Saúva Discovery at Chapada" dated February 10, 2022.

## Robust Operating Performance & Cash Generation

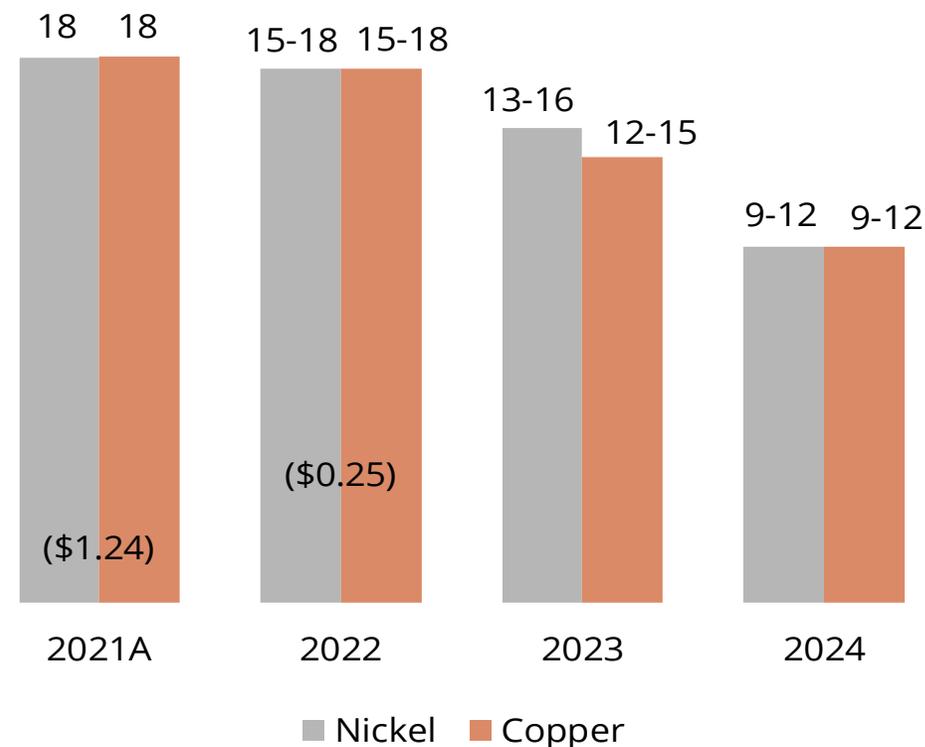
- Q1/22 production of 4,281 t of nickel and 4,420 t of copper at a first-quartile cash cost of negative \$1.25/lb nickel
- production of copper and nickel trending at high-end of guidance; production to be modestly weighted to H2/22 on grade profile
- Q1/22 cash cost benefited from higher sales and by-product copper credits, and is trending positively compared to annual guidance
- inflationary impacts on operating costs being largely offset by production volumes and by-product metal prices



Peter Rockandel, President & CEO, visit to Eagle Mine – February 2022

## Nickel, Copper Production & Cash Cost Outlook<sup>1</sup>

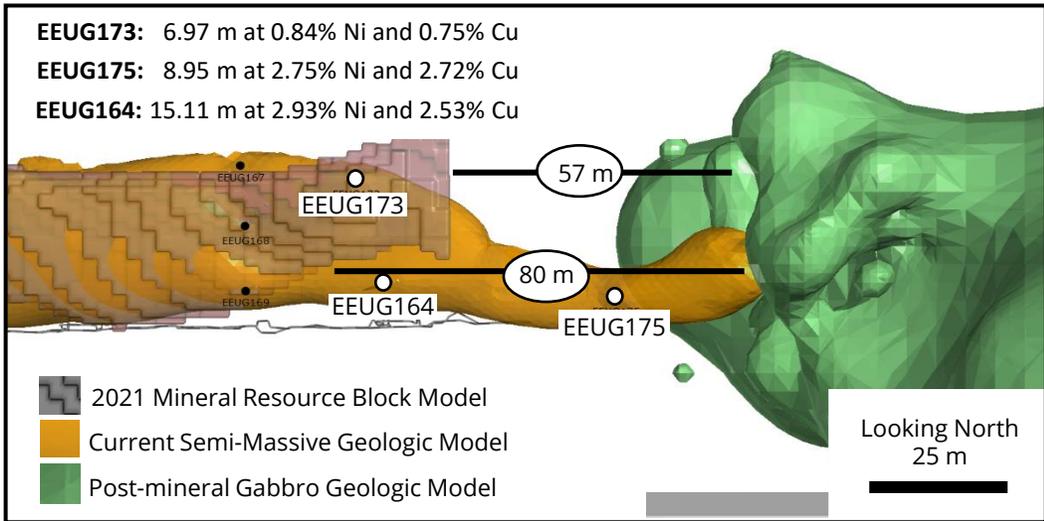
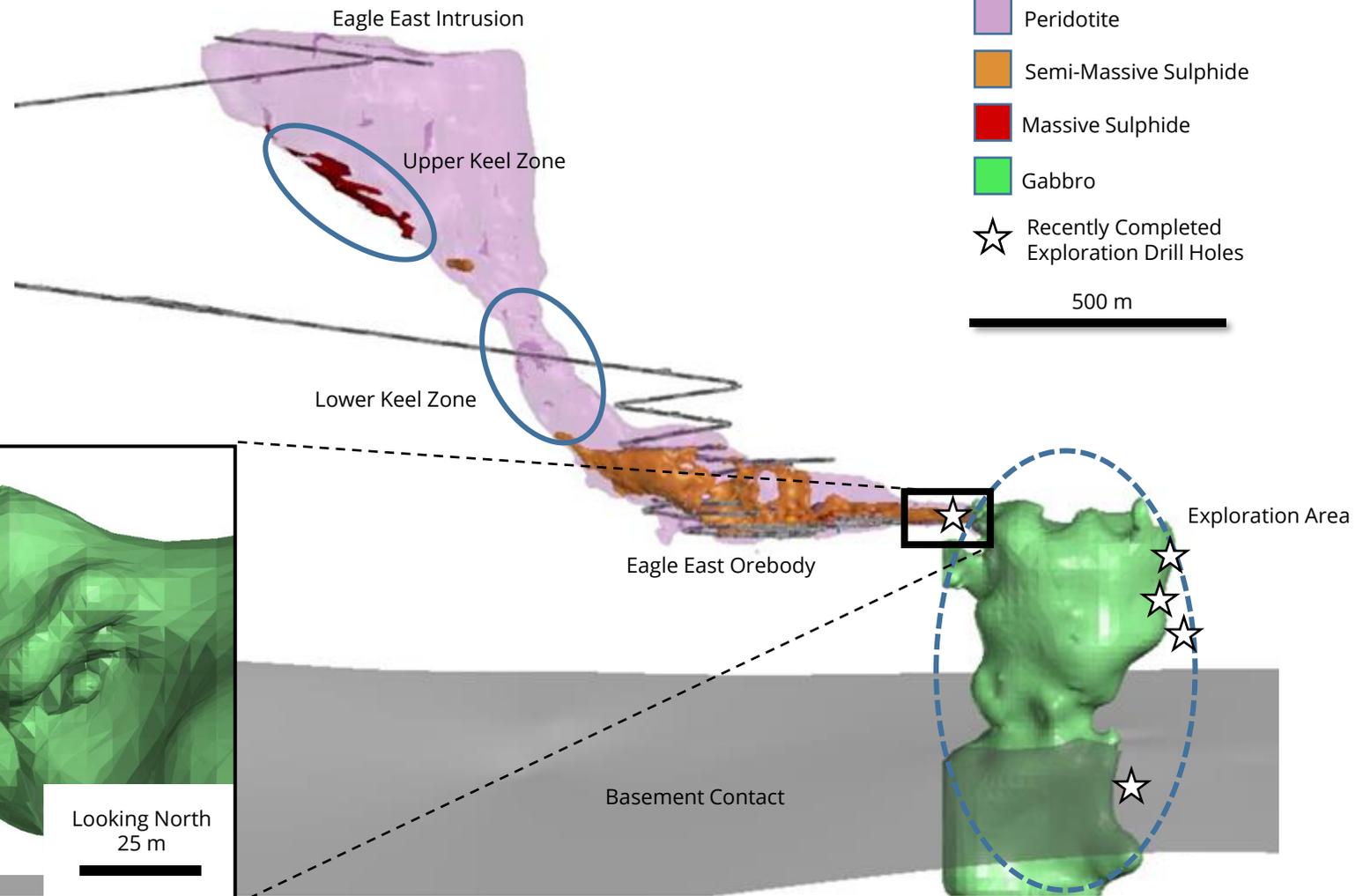
(kt & \$/lb Ni, net of by-product credits)



1. Nickel and copper production and cash cost guidance for 2022 is as most recently disclosed in Lundin Mining's MD&A for the three months ended March 31, 2022. Guidance for 2023 and 2024 is as announced by news release entitled "Lundin Mining Provides Operational Outlook & Update" dated November 22, 2021.

# Eagle East Exploration and Growth

- Upper Keel zone to be included in 2023 life-of-mine plan with the aim of first ore in H1/24
- Q1/22 drilling has extended Eagle East semi-massive sulphide mineralization by 57-80 m to the east
- underground exploration program to increase to four drill rigs with high-power borehole EM



## Zinc Expansion Project Ramping Up

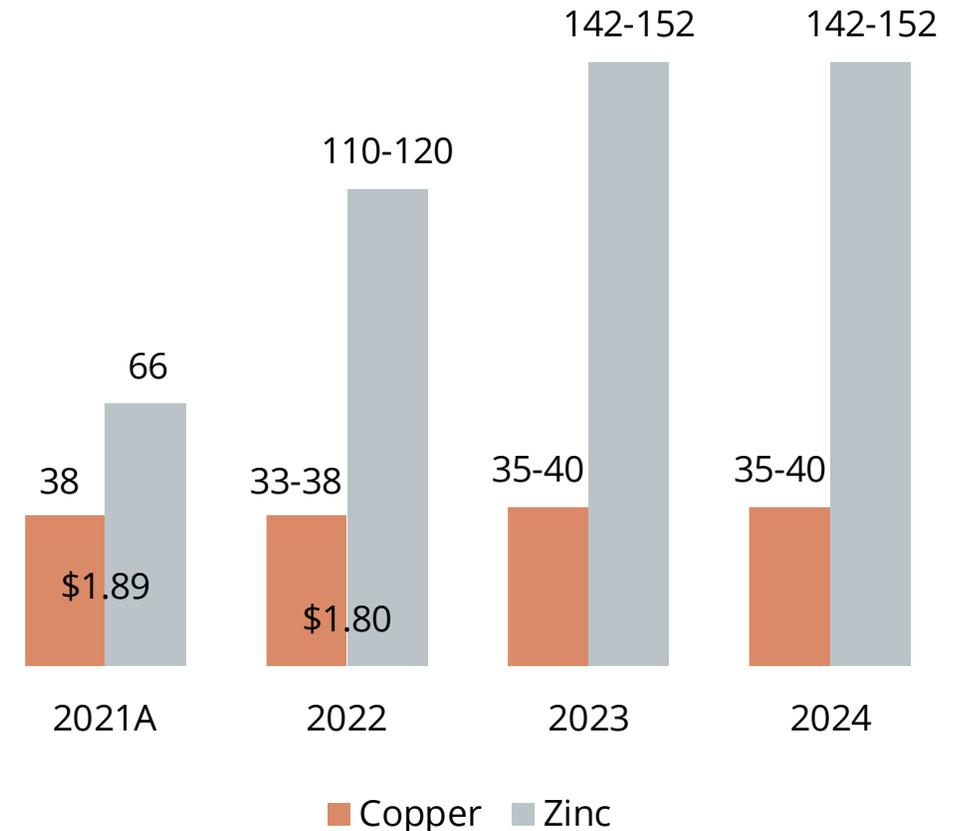
- Q1/22 production of 9,860 t of copper, 14,751 t of zinc and 793 t of lead at a cash cost of \$1.70/lb copper
- copper and zinc production are tracking well to annual guidance
- all of ZEP primary production equipment commissioned in Q1/22; remaining ZEP work progressing on schedule and on budget
- higher consumables costs, including electricity, more than offset by higher sales volumes and by-product credits
- completed over 7,700 m of planned 32,600 m 2022 program with focus on Zambujal East extension towards Semblana deposit, and Monte Branco orebody



ZEP surface facilities – February 2022

## Copper, Zinc Production & Cash Cost Outlook<sup>1</sup>

(kt & \$/lb Cu, net of by-product credits)



1. Copper and zinc production and cash cost guidance for 2022 is as most recently disclosed in Lundin Mining's MD&A for the three months ended March 31, 2022. Guidance for 2023 and 2024 is as announced by news release entitled "Lundin Mining Provides Operational Outlook & Update" dated November 22, 2021.

## Strong Performance

- Q1/22 production of 17,640 t of zinc, 1,198 t of copper and 6,728 t of lead at a cash cost of \$0.27/lb of zinc in-line with plan and tracking to guidance
- both mine and mill continue to perform very well
- zinc feed grades to increase over the course of this year based on mine sequencing
- Q1/22 cash costs better than plan as a result of higher by-product credits and lower treatment charges



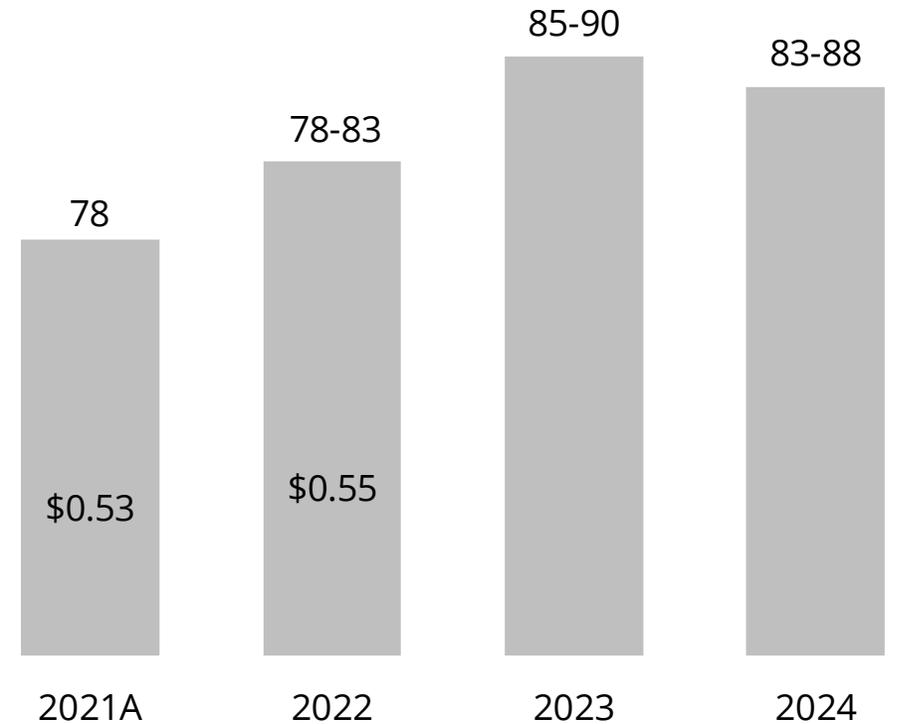
Zinkgruvan concentrator process operator

## Growth & Exploration Advancing

- approved sequential flotation project to further improve concentrate grades and metal recoveries
- over 4,400 m of exploration drilling completed in Q1/22
- focus is on the extension of Dalby and area between Burkland and Nygruvan orebodies

## Zinc Production & Cash Cost Outlook<sup>1</sup>

(kt & \$/lb Zn, net of by-product credits)



1. Zinc production and cash cost guidance for 2022 is as most recently disclosed in Lundin Mining's MD&A for the three months ended March 31, 2022. Guidance for 2023 and 2024 is as announced by news release entitled "Lundin Mining Provides Operational Outlook & Update" dated November 22, 2021.

# **lundin mining**



**High Quality Competitive Mines**



**Meaningful Scale & Growth Oriented**



**Financial Strength**

# 2022 Guidance Summary<sup>1</sup>

		Production (contained metal in conc.)		Cash Cost <sup>2</sup>
<b>Copper (t)</b>	Candelaria (100%)	155,000	- 165,000	\$1.55 <sup>3</sup>
	Chapada	53,000	- 58,000	\$1.60 <sup>3</sup>
	Eagle	15,000	- 18,000	
	Neves-Corvo	33,000	- 38,000	\$1.80 <sup>3</sup>
	Zinkgruvan	2,000	- 3,000	
	<b>Total</b>	<b>258,000</b>	<b>- 282,000</b>	
<b>Zinc (t)</b>	Neves-Corvo	110,000	- 120,000	
	Zinkgruvan	78,000	- 83,000	\$0.55 <sup>3</sup>
	<b>Total</b>	<b>188,000</b>	<b>- 203,000</b>	
<b>Gold (oz)</b>	Candelaria (100%)	83,000	- 88,000	
	Chapada	70,000	- 75,000	
	<b>Total</b>	<b>153,000</b>	<b>- 163,000</b>	
<b>Nickel (t)</b>	Eagle	15,000	- 18,000	(\$0.25)
	<b>Total</b>	<b>15,000</b>	<b>- 18,000</b>	

## Capital Expenditures (\$M)

### Sustaining Capital

Candelaria (100% basis)	370
Chapada	65
Eagle	10
Neves-Corvo	95
Zinkgruvan	60
Other	25

**Total Sustaining Capital 625**

**Zinc Expansion Project (Neves-Corvo) 30**

**Total Capital Expenditures<sup>2</sup> 655**

- intend to spend up to \$300 million on the Josemaria project, post-close, to advance the project ahead of a construction decision in H2/22
- \$45M to be invested in our 2022 exploration programs, including over 170,000 m of drilling at producing operations

1. Guidance as originally announced by news release entitled, "Lundin Mining Provides Operational Outlook & Update" dated November 22, 2021 and most recently discussed in Lundin Mining's MD&A for the three months ended March 31, 2022.  
2. Based on various assumptions and estimates, including but not limited to production volumes, as noted above, commodity prices (Cu: \$3.90/lb, Zn: \$1.15/lb, Pb: \$0.90/lb and Au: \$1,800/oz), foreign exchange rates (€/USD:1.20, USD/SEK:8.20, CLP/USD:700 and USD/BRL:5.10) and operating costs.  
3. 68% of Candelaria's total gold and silver production are subject to a streaming agreement, and silver production at Zinkgruvan and Neves-Corvo are also subject to streaming agreements. Candelaria cash costs are calculated based on receipt of approximately \$420/oz of gold and \$4.20/oz of silver in the year. Chapada cash costs are calculated on a by-product basis and do not include the effects of its copper stream agreements. Effects of the copper stream agreements are reflected in copper revenue and will impact realized price per pound.

## Tailings Management

- employ a comprehensive and integrated approach to tailings management. This provides confidence that potential environmental and social impacts can be reliably identified and minimized
- our Responsible Mining Policy and Responsible Mining Management System (RMMS) include tailings specific principles and standards. All Lundin Mining's operations manage their tailings in accordance with the Tailings Management Standard. The Tailings Management Standard requires that for all tailings facilities throughout the entire lifecycle, from planning and design, construction, operation, closure, and post-closure, implementation of leading practices will be carried out
- **Lundin Mining is committed to the implementation of the Global Industry Standard on Tailings Management (GISTM), which is the first global standard on tailings management.** Lundin Mining plans to be in full conformance with the GISTM within five years of August 5, 2020

## Our Facilities

**5** Active tailings facilities

**6** Inactive/closed tailings facilities

- of the five Lundin Mining operations, Eagle Mine is the only operation that does not have a constructed tailings impoundment with dams
- the five active tailings facilities use various construction techniques for the main and secondary or perimeter dams, but none use upstream construction
- also maintains and monitors six inactive/closed tailings facilities

A full list of tailings facilities that Lundin Mining manages, including information on tailings management, construction method, maximum dam height and volume, can be found in our [Tailings Management Information Sheet](#) in Our [Approach to Tailings Management](#)



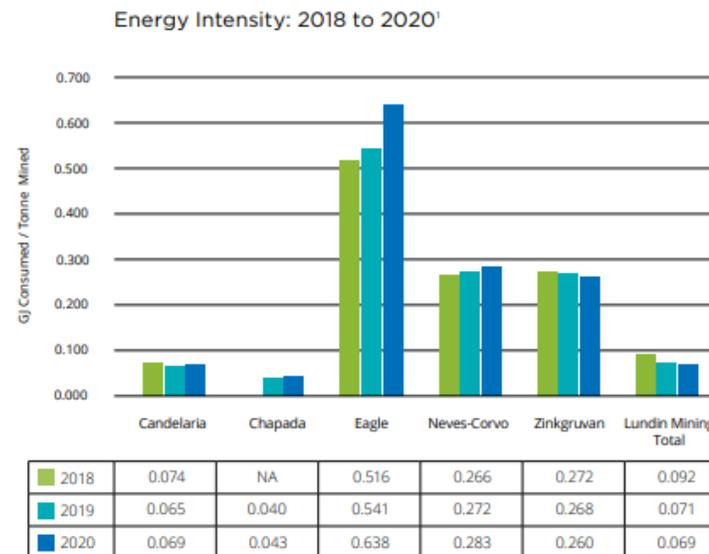
Cerro do Lobo Tailings Facility at Neves-Corvo in Portugal

## Climate Change, Energy and CHG Emissions

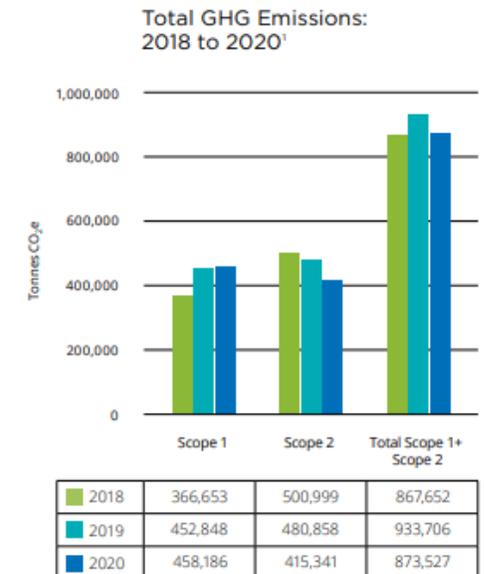
- recognize the need for effective approaches to managing climate-related responsibilities, especially in consideration of the remote locations in which we operate, the energy-intensive nature of our industry, and the sometimes-limited availability of renewable energy in national energy supply
- scoped and developed a corporate climate change adaptation and mitigation planning toolkit that will enhance the resilience of our operations by formalizing site-level, climate-related risk assessments for the development and prioritization of climate adaptation strategies
- our market-based Scope 2 emissions continue to **benefit from Zinkgruvan’s investment in a 100% renewable electricity supply** since 2017 supported by a Guarantee of Origin. We will also realize the positive effect of **Candelaria’s contractual agreement with its supplier for an increase in renewables to a minimum of 80%** in the energy mix, prioritizing wind and solar energy, commencing in 2023
- decreasing trend in energy intensity and GHG emissions intensity, per tonne rock mined, since 2016 has continued.** Chapada has the lowest intensity levels arising from the movement of significant quantities of material over relatively short distances. Candelaria’s low energy intensity levels also reflect the large tonnage of ore and waste rock excavated.

## Retain an Above Average ‘B’ CDP Score

- we report annually to the CDP Climate Change and Forestry programs, aligned with the Task Force on Climate-related Financial Disclosures
- retained an above average ‘B’ score, a significant achievement within the context of a North America regional average score of ‘D’ and a metallic mineral mining sector average score of ‘C’



<sup>1</sup> Chapada data included from July 2019.



<sup>1</sup> Chapada data included from July 2019.

## Water Stewardship

- continue to make water stewardship gains, achieving measurable reductions in freshwater use and increases in water re-use in 2020
- committed to improvements in water assessment and management practices, evaluating water-use efficiency, initiatives to prevent unnecessary pressure on shared resources and measures to minimize environmental and social impacts
- all operations continuously seek to improve their site water balances and water management plans, implementing comprehensive water management planning processes
- future efforts in water management will include an increased focus on the resilience of site water management infrastructure, and processes and procedures concerning the potential for more frequent and extreme weather events in changing climatic environments

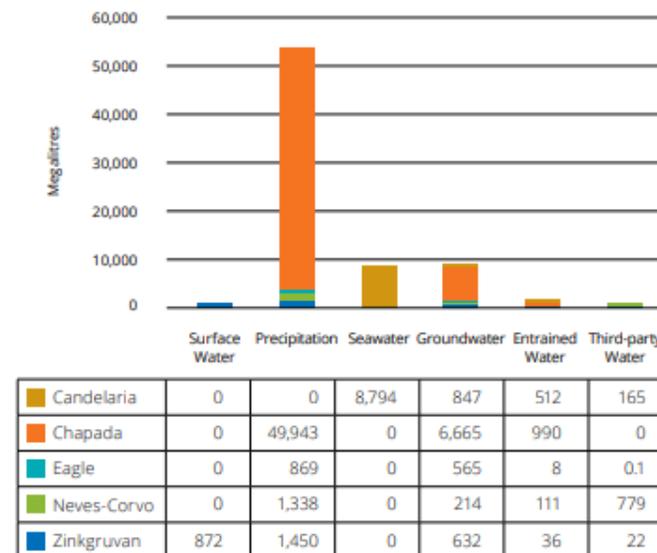
## Candelaria’s operational water requirements met through supply from its sea water desalination facility



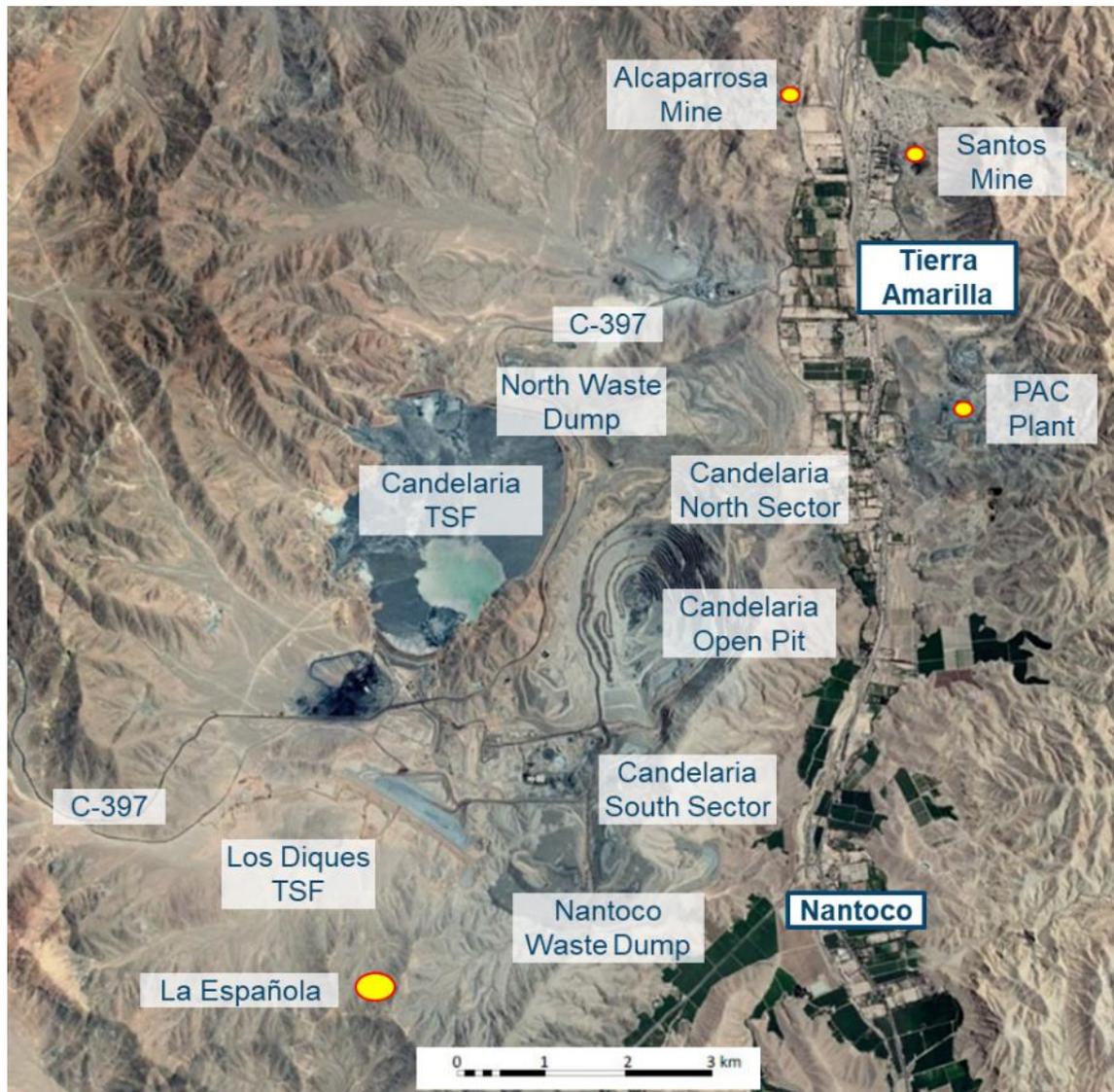
Candelaria desalination facility

- the operation maintains a strong focus on water use efficiency
- use of treated municipal wastewater ceased 2019, significantly earlier than the 2027 regulatory requirement, enabling these resources to be redirected to other uses in this water-scarce region

Water Withdrawal by Operation and Source 2020



# Candelaria Complex – Mineral Resources and Mineral Reserves<sup>1</sup>



Candelaria Copper Mining Complex

Ownership	80%
Location	Region III, Chile
Mine life	+20 years
2022 exploration budget	\$15M
P&P Copper Mineral Reserves	3,583 kt contained (675,574 kt at 0.53%)
M&I Copper Mineral Resources	7,854 kt contained (1,244,543 kt at 0.63%)
Inferred Copper Mineral Resources	740 kt contained (99,029 kt at 0.75%)
P&P Gold Mineral Reserves	2.7 Moz contained (675,574 kt at 0.12 g/t)
M&I Gold Mineral Resources	5.6 Moz contained (1,244,543 kt at 0.14 g/t)
Inferred Gold Mineral Resources	0.5 Moz contained (99,029 kt at 0.16 g/t)
P&P Silver Mineral Reserves	39 Moz contained (675,574 kt at 1.79 g/t)
M&I Silver Mineral Resources	83 Moz contained (1,244,543 kt at 2.1 g/t)
Inferred Silver Mineral Resources	7 Moz contained (99,029 kt at 2.3 g/t)

1. For more information please refer to the Company's Technical Report for the Candelaria Copper Mining Complex, November 28, 2018 and the Company's news release dated September 13, 2021 entitled "Lundin Mining Announces 2021 Mineral Resource and Mineral Reserve Estimates" on the Company's website ([www.lundinmining.com](http://www.lundinmining.com)). See also slide 32.

# Chapada – Mineral Resources and Mineral Reserves<sup>1</sup>



Source: Google Earth

Ownership	100%
Location	Goiás State, Brazil
Mine life	+30 years
2022 exploration budget	\$10M
P&P Copper Mineral Reserves	1,710 kt contained (754,870 kt at 0.23%)
M&I Copper Mineral Resources	2,508 kt contained (1,075,009 kt at 0.23%)
Inferred Copper Mineral Resources	473 kt contained (209,102 kt at 0.23%)
P&P Gold Mineral Reserves	4.4 Moz contained (820,065 kt at 0.16 g/t)
M&I Gold Mineral Resources	7.3 Moz contained (1,222,526 kt at 0.18 g/t)
Inferred Gold Mineral Resources	0.7 Moz contained (221,667 kt at 0.10 g/t)

1. For more information please refer to the Company's Technical Report on the Chapada Mine, Goiás State, Brazil dated October 10, 2019 and the Company's news release dated September 13, 2021 entitled "Lundin Mining Announces 2021 Mineral Resource and Mineral Reserve Estimates" on the Company's website ([www.lundinmining.com](http://www.lundinmining.com)). Mineral Resources are based on the summation of Chapada and Suruca gold only. See also slide 32.

# Eagle Mine – Mineral Resources and Mineral Reserves<sup>1</sup>

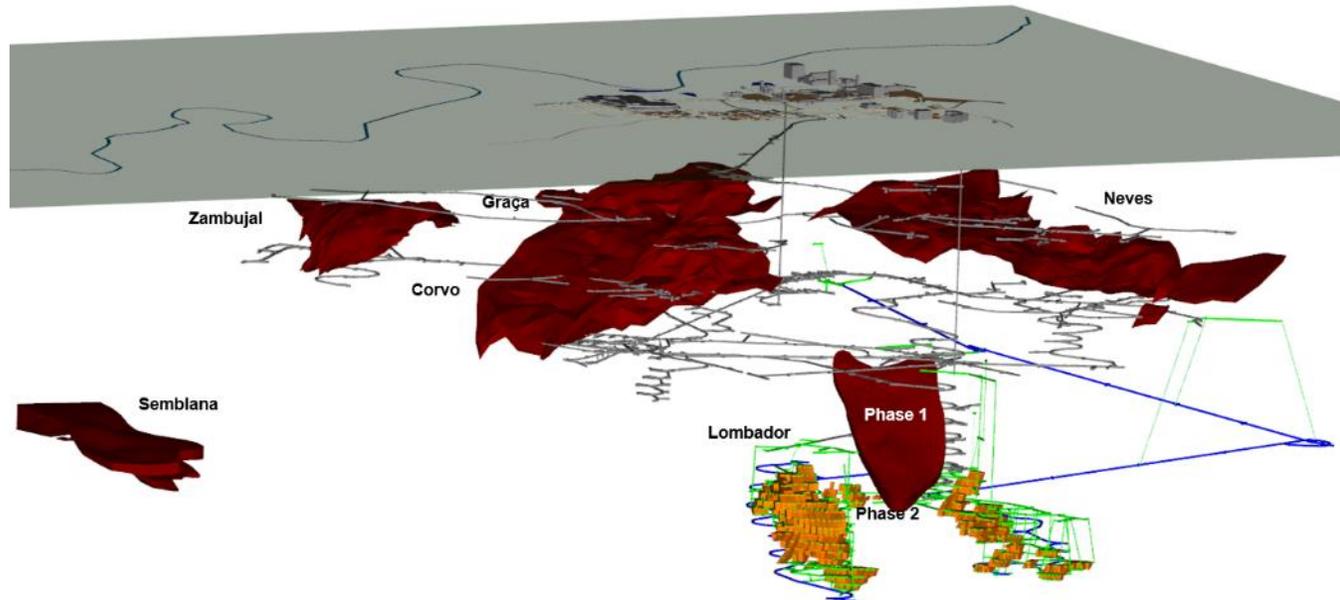


Eagle Mine

Ownership	100%
Location	Michigan, USA
Mine life	4 years
2022 exploration budget	\$2M
P&P Nickel Mineral Reserves	77 kt contained (3,280 kt at 2.4%)
M&I Nickel Mineral Resources	83 kt contained (3,055 kt at 2.7%)
P&P Copper Mineral Reserves	64 kt contained (3,280 kt at 1.9%)
M&I Copper Mineral Resources	68 kt contained (3,055 kt at 2.2%)

1. For more information please refer to the Company's Technical Report on the Eagle Mine dated April 26, 2017 and the Company's news release dated September 13, 2021 entitled "Lundin Mining Announces 2021 Mineral Resource and Mineral Reserve Estimates" on the Company's website ([www.lundinmining.com](http://www.lundinmining.com)). See also slide 32.

# Neves-Corvo – Mineral Resources and Mineral Reserves<sup>1</sup>



Schematic of Neves-Corvo Mine highlighting ZEP development and mining areas

Ownership	100%
Location	Alentejo region, Portugal
Mine life	+10 years
2022 exploration budget	\$8M
P&P Zinc Mineral Reserves	1,858 kt contained (24,774 kt at 7.5%)
M&I Zinc Mineral Resources	4,702 kt contained (68,352 kt at 6.9%)
Inferred Zinc Mineral Resources	230 kt contained (4,071 kt at 5.7%)
P&P Copper Mineral Reserves	537 kt contained (25,090 kt at 2.1%)
M&I Copper Mineral Resources	1,370 kt contained (60,008 kt at 2.3%)
Inferred Copper Mineral Resources	231 kt contained (12,681 kt at 1.8%)
Inferred Semblana Copper Mineral Resources	223 kt contained (7,807 kt at 2.9%)

1. For more information refer to the NI 43-101 Technical Report for the Neves-Corvo Mine, Portugal dated June 23, 2017 and the Company's news release dated September 13, 2021 entitled "Lundin Mining Announces 2021 Mineral Resource and Mineral Reserve Estimates" on the Company's website ([www.lundinmining.com](http://www.lundinmining.com)). See also slide 32.

# Zinkgruvan – Mineral Resources and Mineral Reserves<sup>1</sup>

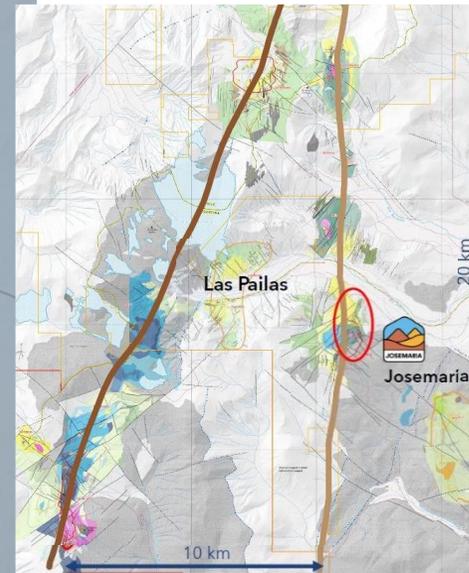


Zinkgruvan Mine

Ownership	100%
Location	Askersund, Sweden
Mine life	+10 years
2022 exploration budget	\$5M
P&P Zinc Mineral Reserves	808 kt contained (10,270 kt at 7.9%)
M&I Zinc Mineral Resources	1,644 kt contained (20,338 kt at 8.1%)
Inferred Zinc Mineral Resources	1,136 kt contained (14,194 kt at 8.0%)
P&P Copper Mineral Reserves	45 kt contained (2,214 kt at 2.0%)
M&I Copper Mineral Resources	86 kt contained (4,011 kt at 2.1%)
Inferred Copper Mineral Resources	4 kt contained (217 kt at 1.7%)

1. For more information please refer Company's news release dated September 13, 2021 entitled "Lundin Mining Announces 2021 Mineral Resource and Mineral Reserve Estimates" on the Company's website ([www.lundinmining.com](http://www.lundinmining.com)). See also slide 32.

# District Potential & First Mover Advantage



- potential to further increase value over the longer-term leveraging Lundin Mining's copper-focused exploration expertise
- Josemaria is positioned to be the potential center of future development and expansion within a highly prospective and emerging district

# Josemaria Mineral Reserves<sup>1</sup> Support Long Life

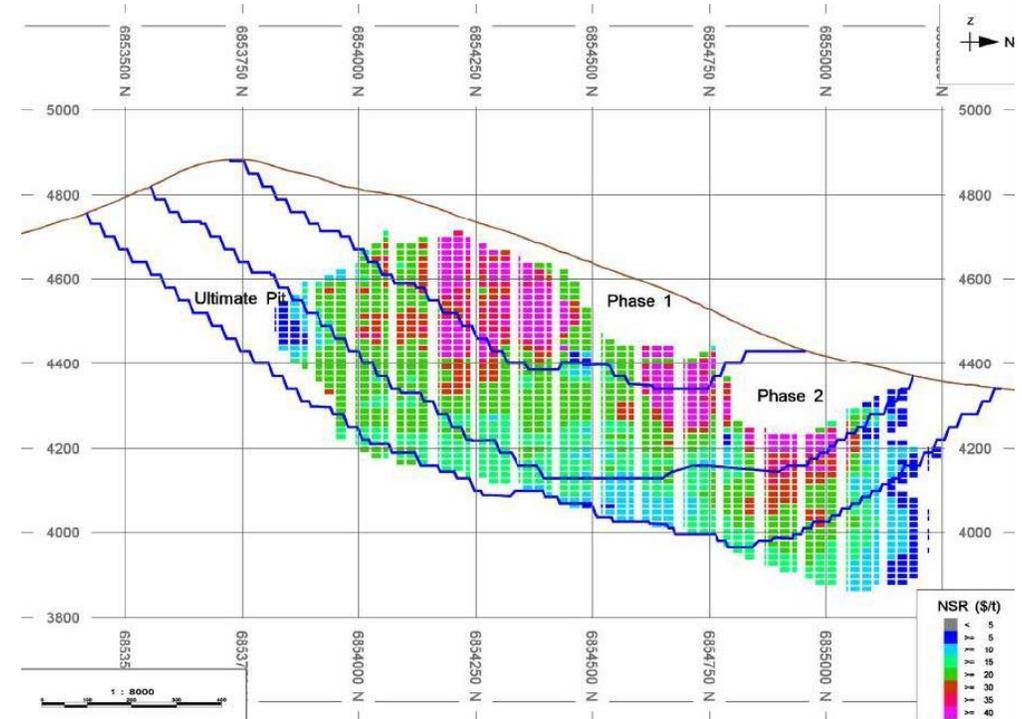
## Mineral Reserve Statement

Category	Tonnes (Mt)	Copper %	Gold g/t	Silver g/t	Contained Metal		
					Copper (M lb)	Gold (M oz)	Silver (M oz)
Proven	197	0.43	0.34	1.33	1,844	2.14	8.43
Probable	815	0.27	0.19	0.85	4,861	4.87	22.29
<b>Total (P&amp;P)</b>	<b>1,012</b>	<b>0.30</b>	<b>0.22</b>	<b>0.94</b>	<b>6,705</b>	<b>7.02</b>	<b>30.72</b>

Notes:

- Mineral Reserves have an effective date of September 28, 2020. The Qualified Person for the estimate is Mr. Robert McCarthy, P.Eng.
- The Mineral Reserves were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), Definition Standards for Mineral Resources and Reserves, as prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
- The Mineral Reserves were based on a pit design which in turn aligned with an ultimate pit shell selected from a Whittle™ pit optimization exercise. Key inputs for that process are:
  - Metal prices of \$3.00/lb copper, \$1,500/oz gold, \$18.00/oz silver.
  - Variable mining cost by bench and material type. Average costs are \$1.351/t, \$1.36/t and \$1.65/t for ore, Non-Acid Generating waste and Potentially Acid Generating waste, respectively.
  - Processing costs vary by metallurgical zone, ranging from \$3.77/t tonalite ore milled to \$3.71/t supergene.
  - Infrastructure on and off-site \$0.43/t milled.
  - Indirect costs \$0.46/t milled.
  - Sustaining capital costs of \$0.54/t milled for tailings and \$0.17/t mined for mining equipment.
  - Pit average slope angles varying from 37° to 43°.
  - Process recoveries for copper and gold are based on grade. The average recovery is estimated to be 85.2% for copper and 62.6% for gold. Silver recovery is fixed at 72.0%.
- Mining dilution is accounted for by averaging grades in adjacent blocks across a thickness of 2.5 m into each block (5.0 m per block contact).
- The Mineral Reserve has an economic cut-off for prime mill feed, based on net smelter return of \$5.22/t, \$5.21/t, \$5.18/t and \$5.16/t milled for tonalite, rhyolite, porphyry and supergene material respectively and an additional \$0.53/t for stockpiled ore.
- There are 991 Mt of waste in the ultimate pit. The strip ratio is 0.98 (waste:ore).
- All figures are rounded to reflect the relative accuracy of the estimate. Totals may not sum due to rounding as required by reporting guidelines

## Long Section of Pit Phase Designs



Source: Josemaria Resources

1. For more information, please refer to the Josemaria Resources Technical Report entitled "NI 43-101 Technical Report, Feasibility Study for the Josemaria Copper-Gold Project, San Juan Province, Argentina" dated November 5, 2020 prepared by or under the supervision of SRK Consulting (Canada) Inc., and filed under Josemaria Resources' SEDAR profile at [www.sedar.com](http://www.sedar.com). See also slide 32.

# Josemaria Mineral Resources<sup>1</sup> Offer Upside Potential

## Sulphide Mineral Resource Statement at 0.1% Copper Equivalent Cut-Off

Category	Tonnes (Mt)	Copper %	Gold g/t	Silver g/t	Contained Metal		
					Copper (B lb)	Gold (M oz)	Silver (M oz)
Measured	197	0.43	0.34	1.3	1.9	2.2	8.5
Indicated	962	0.26	0.18	0.9	5.5	5.6	26.6
<b>Total (M&amp;I)</b>	<b>1,159</b>	<b>0.29</b>	<b>0.21</b>	<b>0.9</b>	<b>7.4</b>	<b>7.8</b>	<b>33.5</b>
Inferred	704	0.19	0.10	0.8	2.9	2.3	18.6

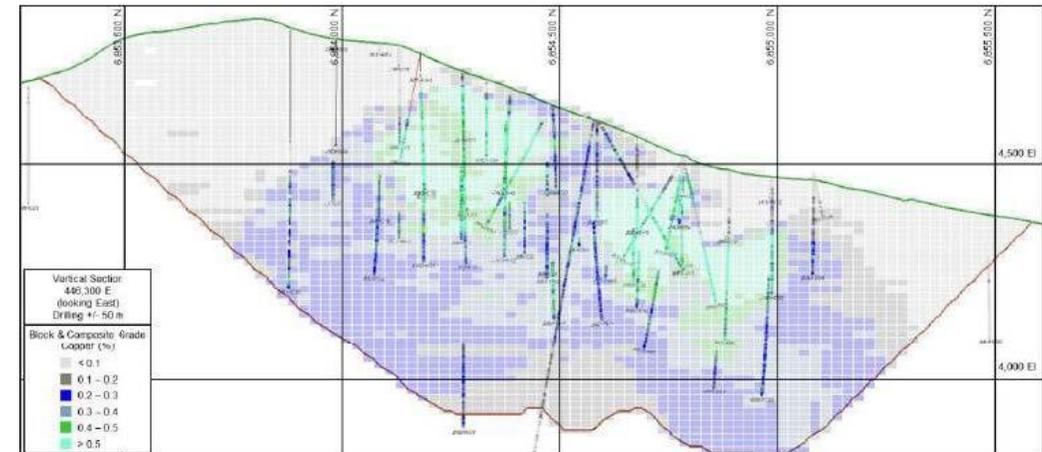
## Oxide Mineral Resource Statement at 0.2 g/t Gold Cut-Off

Category	Tonnes (Mt)	Gold g/t	Silver g/t	Contained Metal	
				Gold (000 oz)	Silver (000 oz)
Measured	26	0.33	1.2	280	994
Indicated	15	0.28	1.3	132	632
<b>Total (M&amp;I)</b>	<b>41</b>	<b>0.31</b>	<b>1.2</b>	<b>410</b>	<b>1,585</b>
Inferred	0				

Notes:

1. Mineral Resources are inclusive of Mineral Reserves.
2. Mineral Resources have an effective date of July 10, 2020. The Qualified Person for the estimate is Mr. James N. Gray, P.Geo.
3. The Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), Definition Standards for Mineral Resources and Reserves, as prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
4. Sulphide copper equivalency equation (CuEq) assumes metal prices of \$3.00/lb copper, \$1,500/oz gold and \$18/oz silver.
5. CuEq is based on copper, gold and silver recoveries derived from metallurgical test work as applied in the pit optimization and mine design process (average life-of-mine recoveries used: 85.2% copper, 62.6% gold, 72.0% silver).
6. The copper equivalency equation used is:  $CuEq (\%) = (\text{copper grade} (\%) \times \text{copper recovery} \times \text{copper price} (\$/t) + \text{gold grade} (\text{oz/t}) \times \text{gold recovery} \times \text{gold price} (\$/\text{oz}) + \text{silver grade} (\text{oz/t}) \times \text{silver recovery} \times \text{silver price} (\$/\text{oz})) / (\text{copper price} (\$/t) \times \text{copper recovery})$
7. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
8. All figures are rounded to reflect the relative accuracy of the estimate. Totals may not sum due to rounding as required by reporting guidelines.

## Copper Block & Composite Grades – Section 446,300 E



Source: Josemaria Resources

1. For more information, please refer to the Josemaria Resources Technical Report entitled "NI 43-101 Technical Report, Feasibility Study for the Josemaria Copper-Gold Project, San Juan Province, Argentina" dated November 5, 2020 prepared by or under the supervision of SRK Consulting (Canada) Inc, and filed under Josemaria Resources' SEDAR profile at [www.sedar.com](http://www.sedar.com). See also slide 32.

# NI 43-101 Compliance

Unless otherwise indicated, Lundin Mining Corporation (the "Company") has prepared the technical information in this presentation including Mineral Reserve and Mineral Resource estimates ("Technical Information") based on information contained in the technical reports and news releases (collectively the "Disclosure Documents") available under the Company's profile and the profile of the Company's wholly-owned subsidiary, Josemaria Resources Inc. ("Josemaria Resources") (100% owner of the Josemaria Project) on SEDAR at [www.sedar.com](http://www.sedar.com). Each Disclosure Document was prepared by or under the supervision of a qualified person ("Qualified Person") as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators ("NI 43-101"). For readers to fully understand the information in this presentation, they should read the technical reports identified below in their entirety, including all qualifications, assumptions and exclusions that relate to the information set out in this presentation which qualifies the Technical Information. Readers are advised that Mineral Resource estimates that are not Mineral Reserves do not have demonstrated economic viability. The Disclosure Documents are each intended to be read as a whole, and sections should not be read or relied upon out of context. The Technical Information is subject to the assumptions and qualifications contained in the Disclosure Documents.

The Technical Information in this presentation has been prepared in accordance NI 43-101 and has been reviewed and approved by Jeremy Weyland, P.Eng., Senior Manager of Studies of the Company, a "Qualified Person" under NI 43-101. Mr. Weyland has verified the data disclosed in this presentation and no limitations were imposed on his verification process.

Mineral Resource and Mineral Reserve estimates of the Company are shown on a 100 percent basis for each mine. The Measured and Indicated Mineral Resource estimates are inclusive of those Mineral Resource estimates modified to produce the Mineral Reserve estimates. All estimates of the Company are prepared as at June 30, 2021. Estimates for all operations are prepared by or under the supervision of a Qualified Person as defined in NI 43-101 or have been audited by independent Qualified Persons on behalf of the Company.

Mineral Reserves for all active mines have been estimated using metal prices of US\$3.00/lb copper, US\$1.00/lb zinc, US\$0.95/lb lead, US\$6.50/lb nickel and US\$1,500/oz gold. Exchange rates used were EUR/USD 1.25, USD/SEK 7.50, USD/CLP 620 and USD/BRL 4.25. For the Suruca gold deposit Mineral Reserve, the metal prices used were US\$3.00/lb copper and US\$1,250/oz gold and an exchange rate of USD/BRL 3.95.

Candelaria and La Española open pit Mineral Resource estimates are reported within a conceptual pit shell based on metal prices of US\$3.45/lb copper and US\$1,500/oz gold with cut-off grades of 0.15% and 0.17% copper, respectively. Candelaria underground Mineral Resources are estimated at a cut-off grade of 0.45% copper within confining grades shells of 0.4% copper. Mineral Reserves for the Candelaria open pit, Española open pit and underground for the Candelaria property are estimated at cut-off grades of 0.16%, 0.19% and 0.50% copper, respectively. Underground Mineral Reserves for the Ojos del Salado property, Santos and Alcaparrosa mines, are estimated at cut-off grades of 0.55% copper and 0.60% copper respectively. Chapada and Suruca SW copper-gold Mineral Resource estimates are reported within a conceptual pit shell based on metal prices of US\$3.45/lb copper and US\$1,725/oz gold and at a variable Net Smelter Return (NSR) marginal cut-off averaging US\$5.15 per tonne. For the Suruca gold only Mineral Resource estimates, cut-off grades of 0.16g/t gold for oxides and 0.23g/t for sulphides were used. Mineral Reserves for the Chapada open pit are estimated at a NSR cut-off of US\$5.15 per tonne. For the Suruca gold only Mineral Reserve estimates cutoff grades of 0.19g/t gold for oxides and 0.30g/t for sulphides are used. Eagle Mineral Resources and Reserves are reported above a fixed NSR cut-off of US\$123/t. The Eagle East Mineral Resources are reported within constraining grade shells based on a fixed NSR cut-off of US\$142/t and the Mineral Reserves are reported above US\$142/t for long-hole stopes and US\$152/t for cut-and-fill stopes. The NSR is calculated on a recovered payable basis considering nickel, copper, cobalt, gold and PGM grades, metallurgical recoveries, prices and realization costs. The Neves-Corvo Mineral Resources are reported within geological volumes based on a nominal NSR copper cut-off value of EUR 32.85/t (grade equivalent to 1.0% copper), and the zinc Mineral Resources are reported within geological volumes based on a nominal NSR zinc cut-off value of EUR 30.55/t (grade equivalent to 4.5% zinc). The Neves-Corvo copper and zinc Mineral Reserve estimates have been calculated using variable NSR values based on area and mining method. The NSR is calculated on a recovered payable basis considering copper, lead, zinc and silver grades, metallurgical recoveries, prices and realization costs. The Neves-Corvo copper Mineral Reserves are estimated above a site average cut-off of EUR 44.4/t (grade equivalent to 1.41% copper). For Neves-Corvo zinc Mineral Reserve estimates a site average cut-off of EUR 45.4/t (grade equivalent to 5.40% zinc) is used. The Mineral Resources at Semblana are estimated above a cut-off grade of 1.0% copper. The Zinkgruvan zinc Mineral Resources are estimated within optimized stope volumes, using a 3.5 m minimum mining width, based on an area dependent marginal NSR cut-off between SEK 475/t and SEK 540/t. The Zinkgruvan copper Mineral Resource estimates are reported within optimized stope volumes above a cut-off NSR values of SEK 475/t. The Zinkgruvan zinc and copper Mineral Reserves are estimated above area-dependent full-cost breakeven NSR cut-off values of between SEK 665/t and SEK 845/t NSR. The NSR is calculated on a recovered payable basis considering copper, lead, zinc and silver grades, metallurgical recoveries, prices and realization costs. Refer to the Company's news release dated September 13, 2021 entitled "Lundin Mining Announces 2021 Mineral Resource and Mineral Reserve Estimates" on the Company's website at [www.lundinmining.com](http://www.lundinmining.com).

Mineral Reserve and Mineral Resource estimates of Josemaria Resources Inc. are shown on a 100 percent basis. The Measured and Indicated Mineral Resource estimates of Josemaria Resources are reported exclusive those Mineral Resources estimates modified to produce the Mineral Reserve estimates. Mineral Reserves have an effective date of September 28, 2020. The Qualified Person for the estimate is Mr. Robert McCarthy, P.Eng. The Mineral Reserves were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), Definition Standards for Mineral Resources and Reserves, as prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council. Mineral Resources have an effective date of July 10, 2020. The Qualified Person for the estimate is Mr. James N. Gray, P.Geo. The Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), Definition Standards for Mineral Resources and Reserves, as prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council. The Mineral Reserves were based on a pit design which in turn aligned with an ultimate pit shell selected from a Whittle™ pit optimization exercise. Mineral Reserves estimated using metal prices of \$3.00/lb copper, \$1,500/oz gold, \$18.00/oz silver. The Mineral Reserve has an economic cut-off for prime mill feed, based on net smelter return of \$5.22/t, \$5.21/t, \$5.18/t and \$5.16/t milled for tonalite, rhyolite, porphyry and supergene material respectively and an additional \$0.53/t for stockpiled ore. Process recoveries for copper and gold are based on grade. The average recovery is estimated to be 85.2% for copper and 62.6% for gold. Silver recovery is fixed at 72.0%. Mineral Resources have been prepared using metal prices of \$3/lb copper, \$1,500/oz gold and \$18/oz silver. Sulphide Mineral Resource Statement at 0.1% Copper Equivalent Cut-Off and Oxide Mineral Resource Statement at 0.2 g/t Gold Cut-Off. CuEq is based on copper, gold and silver recoveries derived from metallurgical test work as applied in the pit optimization and mine design process (average life-of-mine recoveries used: 85.2% copper, 62.6% gold, 72.0% silver). Refer to Josemaria Resources' news release dated November 15, 2021 entitled "Josemaria Reports Third Quarter 2021 Results".

For further Technical Information on to Josemaria Resources' Josemaria project, please refer to the Josemaria Technical Report, which is available on Josemaria Resources' SEDAR profile at [www.sedar.com](http://www.sedar.com).

For further Technical Information on the Company's material properties, refer to the following technical reports, each of which is available on the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com):

Candelaria: technical report entitled Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile dated November 28, 2018.

Chapada: technical report entitled Technical Report on the Chapada Mine, Goiás State, Brazil dated October 10, 2019

Neves-Corvo: technical report entitled NI 43-101 Technical Report for the Neves-Corvo Mine, Portugal dated June 23, 2017.

Eagle Mine: technical report entitled Technical Report on the Eagle Mine, Michigan, U.S.A. dated April 26, 2017.

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