



# Unlocking silver growth in Morocco

**INVESTOR  
PRESENTATION**

**SEPTEMBER 2024**

TSX: AYA | OTCQX: AYASF

# Forward-Looking Statements

The Zgounder Expansion Feasibility Study ("FS") is based on a technical report entitled "NI43-101 TECHNICAL REPORT – FEASIBILITY STUDY ZGOUNDER EXPANSION PROJECT", originally dated March 31, 2022, and amended on June 16, 2022 with an effective date of December 13, 2021 (the "Zgounder Report") which was prepared under the supervision of Daniel M. Gagnon, DRA, with the participation of William Stone, Antoine Yassa, Jarita Barry, Fred Brown, Eugene Puritch, Daniel Morrison, André-François Gravel, Claude Bisailon, Julie Gravel, Kathy Kalenchuk, Hugo Della Sbarba, Philippe Rio Roberge, Richard Barbeau & Stephen Coates all "qualified persons" for the purpose of the Zgounder Report. Scientific and technical information contained in this presentation has been reviewed and approved David Lalonde, B.Sc, Aya's Head of Exploration and a QP as defined under NI 43-101. Mineral Resources are reported exclusive of Mineral Reserves and as such the Mineral Resources do not have demonstrated economic viability. Numbers may not add or multiply accurately due to rounding. Inferred Mineral Resources 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 therefore no certainty that the conclusions of the initial exploration drilling results will be realized. Additionally, where the Company discusses exploration/expansion potential, any potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource. Varying cut-off grades have been used depending on the mine, methods of extraction and type of ore contained in the reserves. Mineral resource metal grades and material densities have been estimated using industry-standard methods appropriate for each mineral project with support of various commercially available mining software packages. Additional details regarding Mineral Reserve and Mineral Resource estimation, classification, reporting parameters, key assumptions and associated risks for each of the Company's mineral properties are provided in the respective NI 43-101 Technical Reports which are available at [www.sedar.com](http://www.sedar.com) and the Company's website at [www.ayagoldsilver.com](http://www.ayagoldsilver.com).

Certain statements and information contained in this presentation are "forward-looking information" within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and assumptions and accordingly actual results and events may differ materially from those implied or expressed therein. This includes statements such as "expected", "anticipated", "growth", "demonstrate", "high-potential", "developing", "lower", "prospective", "adding", "continuous", "will", "timeline", "favorable", "opportunities", "backstopped", "expand", "extend", "expected", "continue", "potential", "deliver", "complete", "achieve", "growing", "increasing", as well as statements by the Corporation concerning expected timelines, including the expected timeline for the Corporation to produce new resources

estimates, and exploration results, including deposit size, quantities, grades and contained metals, which are generally made on the basis of estimations and extrapolations from a limited number of drill holes and assays. These estimations and extrapolations are subject to uncertainties, which include but are not limited to uncertainty in connection with evaluating a deposit until the deposit has been extensively drilled on closely spaced centers. Should one or more of these underlying estimations or extrapolations prove incorrect, actual results may vary materially from those described in forward-looking statements.

Forward-looking statements contained herein also include the Corporation's plans for its mineral properties, which involve known and unknown risks, uncertainties and other factors which may cause the Corporation's actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Forward-looking information is subject to a variety of risks and uncertainties, which could cause actual events or results to differ from those reflected in the forward-looking information, including, without limitation, the ability of the Corporation to continue to access capital markets for the funding necessary to acquire and maintain exploration properties and to carry out its desired exploration programs; difficulties in executing exploration programs according to the Corporation's proposed schedules and within its cost estimates, whether due to weather conditions in the areas where it operates; increasingly stringent environmental regulations and other permitting restrictions, or the availability of essential supplies and services; and factors beyond the capacity of the Corporation to anticipate and control, such as the marketability of minerals, government regulations relating to health, safety and the environment, and the scale and scope of royalties and taxes on production and other risks described in the Corporation's documents filed with Canadian securities regulatory authorities. You can find further information with respect to these and other risks in the Corporation's 2024 Q2 MD&A, and other filings made with Canadian securities regulatory authorities and available at [www.sedarplus.ca](http://www.sedarplus.ca). Should one or more of these risks or uncertainties materialize, actual results may vary materially from those described in forward-looking statements.

Accordingly, readers are advised and cautioned not to place undue reliance on forward-looking information. Except as required under applicable securities legislation, the Corporation undertakes no obligation to publicly update or revise forward-looking information, whether as a result of new information, future events or otherwise.

# 1

## AYA

1. Aya
2. Zgounder Silver Mine
3. Exploration



# Aya / Proven Management Team



**Benoit La Salle, FCPA, MBA**  
President & CEO, Director

Benoit has over 25 years of experience as a corporate executive in the mining industry. Benoit founded, developed and led SEMAFO into a 250,000 oz gold producer in West Africa, delivering more than a billion dollars of value to shareholders. Benoit holds a BCom from McGill University and an MBA from IMEDE, Switzerland.



**Mustapha Elouafi**  
President-Managing Director,  
Morocco

Mustapha is an established mining executive with almost 30 years in mining and senior management in Morocco and MENA. Previously, he was Managing Director of OCP S.A., the world's largest producer of phosphate and phosphate-based products, and served as president of affiliates of OCP Group. A graduate of the Mohammadia School of Engineering in Morocco, Mr. Elouafi holds an Executive MBA from École des Ponts Business School in Paris.



**Ugo Landry-Tolszczuk**  
Chief Financial Officer

Ugo's involvement with Africa spans 12 years of his 15-year professional experience and includes positions as President and COO of TSXV-listed SRG Mining and director of operations for Windiga Energy. A CFA charter holder, Ugo holds a bachelor's degree of applied science in computer engineering, management science option, from the University of Waterloo.



**Elias Elias**  
Chief Legal and  
Sustainability Officer

Elias brings with him over 15 years of legal experience, mainly focused on advising West African-focused mining and energy companies such as SRG Mining, Sama Resources, Windiga Energy and SEMAFO. Elias holds a civil law degree (summa cum laude), a common law degree (cum laude) from the University of Ottawa and has been a member of the Barreau du Québec since 2007.



**David Lalonde**  
Vice-President Exploration &  
Qualified Person

David is a geologist with over 20 years of experience in progressively senior exploration roles. His expertise has been acquired in Canada and internationally (Russia, West Africa, and Oman), primarily in precious metals exploration with SEMAFO Inc. and Kinross Gold. Prior to joining Aya, David was head of exploration for MDO, Oman's government-backed mining company. David earned his B.Sc. in geology at Université du Québec à Montréal.



**Alex Ball**  
Vice-President, Corporate  
Development & Investor Relations

During his more than 15-year corporate finance career, Alex managed \$5 billion in debt, equity financings and M&A transactions in mining with UBS Canada, CIBC World Markets, and BMO Capital Markets. Previously, he was Executive Vice-President, Finance & Corporate Development at Algold Resources. Alex has an MBA majoring in finance from University of Toronto's Rotman School of Management and a BA in Economics from McGill University.



**Meryem Baroudi**  
Dir, HR & General Affairs

Meryem Baroudi has over 20 years' experience in human resources management in the mining industry. Prior to Aya, Meryem worked as an independent HR expert consultant for large companies in different sectors. Before this, she held different HR mgmt. positions at OCP S.A., the world's largest producer of phosphate and phosphate-based products, where she began her career as an engineer in operations in 1997. Meryem earned a degree in civil engineering at "Ecole Hassania des Travaux Publics" in Morocco.



**Raphaël Beaudoin**  
Vice-President,  
Operations

Raphaël has over 10 years of mineral processing experience across various operations and projects in West Africa and Canada. Prior to Aya, Raphaël was Vice-President, Operations, Metallurgy and Process Design at SRG Mining and director of operations at Sama Resources, two resource companies focused on West African projects. Before this, he held positions of increasing responsibility at Canadian Royalties Inc. Raphaël earned a degree in materials engineering at McGill University.

# Aya / Experienced Board of Directors



**Benoit La Salle, FCPA, MBA**  
President & CEO, Director

Benoit has over 25 years of experience as a corporate executive in the mining industry. Benoit founded, developed and led SEMAFO into a 250,000 oz gold producer in West Africa, delivering more than a billion dollars of value to shareholders. Benoit holds a BCom from McGill University and an MBA from IMEDE, Switzerland.



**Robert Taub**  
Chair

Robert is an entrepreneur in life sciences and investor in several pharmaceutical and medical device companies. Mr. Taub is currently chairman of a NASDAQ-listed company. Robert holds a BA Languages from the University of Antwerp, Belgium and an MBA from INSEAD, France.



**Annie Torkia Lagacé**  
Director

Annie brings over 20 years of legal and financial experience, mainly within the mining and aerospace sectors. Until recently, Ms. Torkia Lagacé held the position of Senior-Vice President, Legal Affairs, General Counsel and Corporate Secretary of Bombardier Inc and served on its ESG steering committee. She holds a civil law degree and a common law degree from University of Ottawa as well as an EMBA from the Schulich School of Business in Toronto and the Kellogg School of Management in Chicago.



**Yves Grou, CPA, CA**  
Director

A CPA CA, Yves holds a degree in Commerce (BCom) from McGill University. He is a member of the Québec Institute of Chartered Professional Accountants. Between 1980 and 2004, he was co-founder and partner of Grou La Salle & Associates. Mr. Grou coordinated and led reverse take-over processes related to several public companies.



**Dr. Jürgen Hambrecht**  
Lead Director

Dr. Jürgen Hambrecht served BASF in various capacities around the world for more than 40 years, lastly as CEO and Chairman of the Supervisory Board. He has served on a multitude of board including Daimler Truck AG, Mercedes Benz AG, Bosch, Lufthansa AG, and Fuchs SE. Currently, he is Chairman of Trumpf SE. Dr. Hambrecht earned his doctorate in Chemistry in 1975 from the University of Tübingen, Germany.



**Ghislane Guedira Bennouna**  
Director

Ghislane is a seasoned finance executive with 30+ years of expertise in mining, real estate and consultancy. Her career includes 11+ years at OCP Group, a global leader in the phosphate and phosphate derivatives industry, where she was CFO for 7 years and advisor to the chairman and CEO for 4 years. Ms. Guedira is founder and MD of Amplitude Conseil and also serves as chair of the audit committees for CDG Capital and RISMA. She holds a MBA from ESCP business school in Paris.



**Eloïse Martin**  
Director

Eloïse has over 10 years of experience in project finance, structured finance, and capital structuring advisory with a focus on the energy and natural resources sector. Currently, she is self-employed. Previously, she was an Executive Director with HCF International Advisers. Ms. Martin holds an MBA from ESSEC Graduate School of Management, Paris, a Master of International Business (Honours) from L'Institut d'Etudes Politiques (Paris), and a Master of Humanities from Sorbonne University.



**Nikolaos Sofronis**  
Director

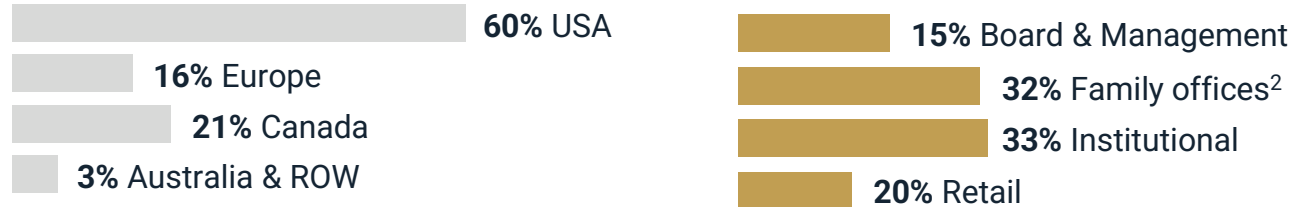
Nikolaos is founder of BS Family Office Assets Management S.A Geneva, specialized in private equity. He gained his over 16 years of experience in private banking within prestigious institutions in Luxembourg and Switzerland. He previously served as Chairman of a London-listed corporation. For the last 20 years, he has been actively involved in the mining sector.

# Aya / Our History



# Capital Structure / Robust Balance Sheet

## Institutional Shareholder Breakdown<sup>1</sup>



<sup>1</sup> Based on 42.5M shares institutional ownership

<sup>2</sup> Affiliated with Aya Board and insiders

| Exchanges – TSX: AYA   OTCQX: AYASF |             |         |
|-------------------------------------|-------------|---------|
| Shares – Basic                      |             | 130.4M  |
| Shares – F.D. <sup>1</sup>          |             | 136.9M  |
| Share Price (Sept. 6, 2024)         | C\$         | \$13.12 |
| Market Cap (Sept. 6, 2024)          | C\$         | \$1.72B |
| Cash (June 30, 2024) <sup>2</sup>   | US\$        | \$103M  |
| Debt <sup>3</sup>                   | US\$        | \$100M  |
| 30-day average volume               | '000 shares | 870     |

**BEST 50**  
**OTC QX**  
2024

**TSX 30**  
2023

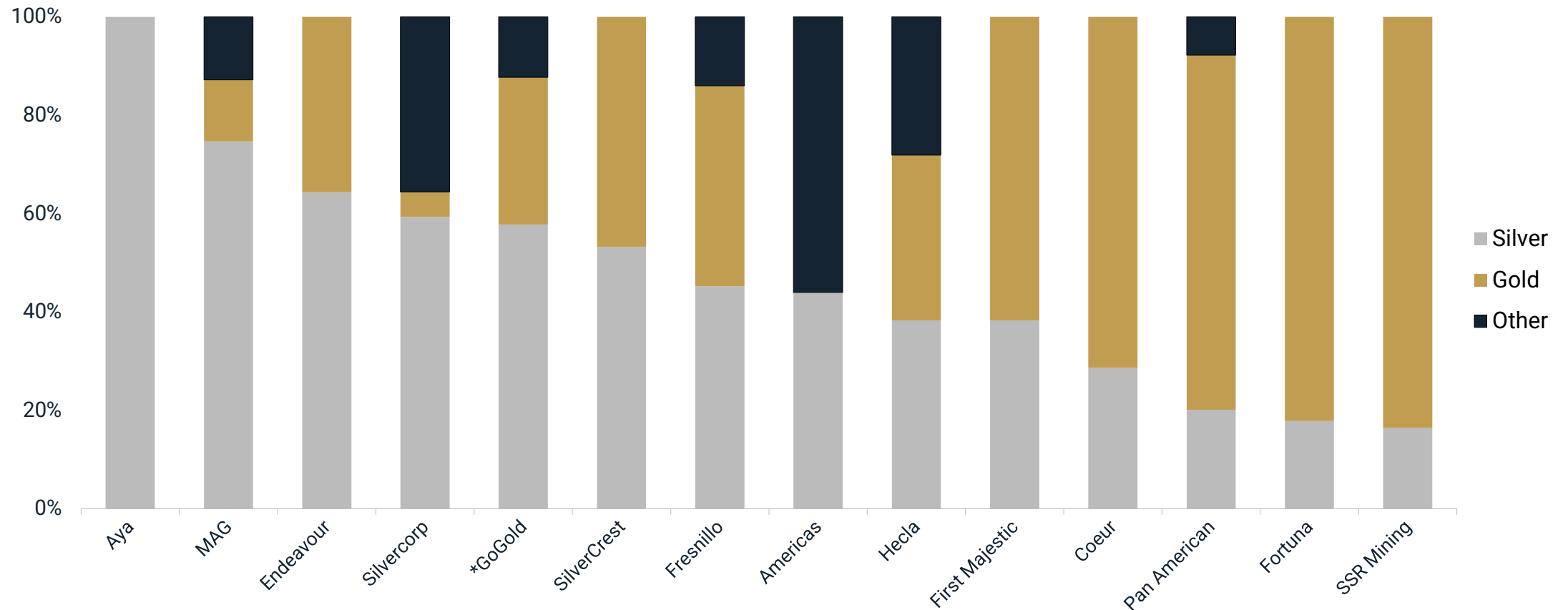
<sup>1</sup> Includes 5.1M in options and 1.8M RSU/DSU.

<sup>2</sup> Non-GAAP Measures, consisting of cash and cash equivalents \$85.1M and restricted cash of \$18.3M

<sup>3</sup> Full drawdown on project financing from EBRD



# Aya / The Only TSX-Listed Pure-Play Silver Producer



Source: Desjardins Capital Markets, company reports.

\*Denotes developer in 2023, for which 2023 metal prices and latest technical report were used

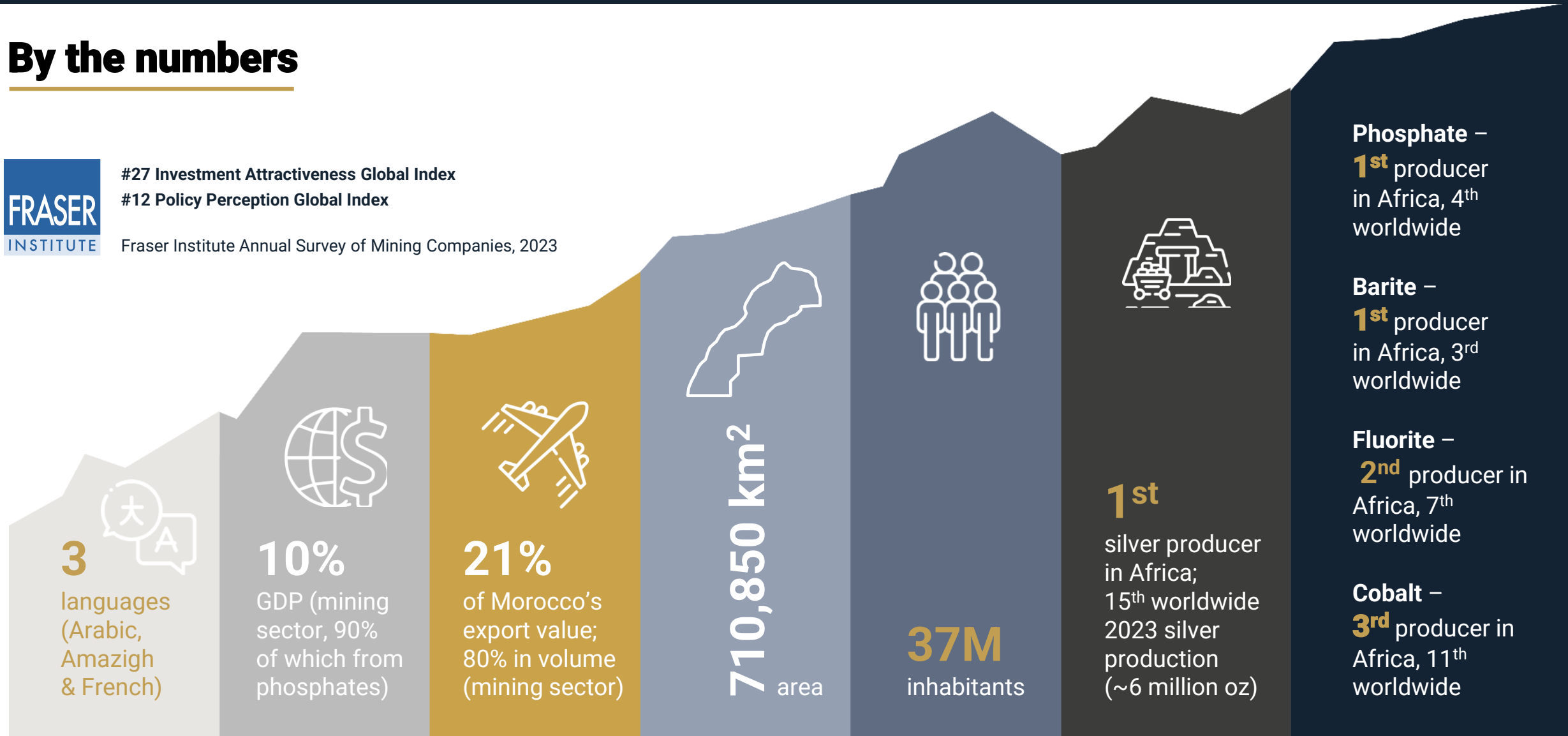
# Morocco / Top Mining Jurisdiction

## By the numbers

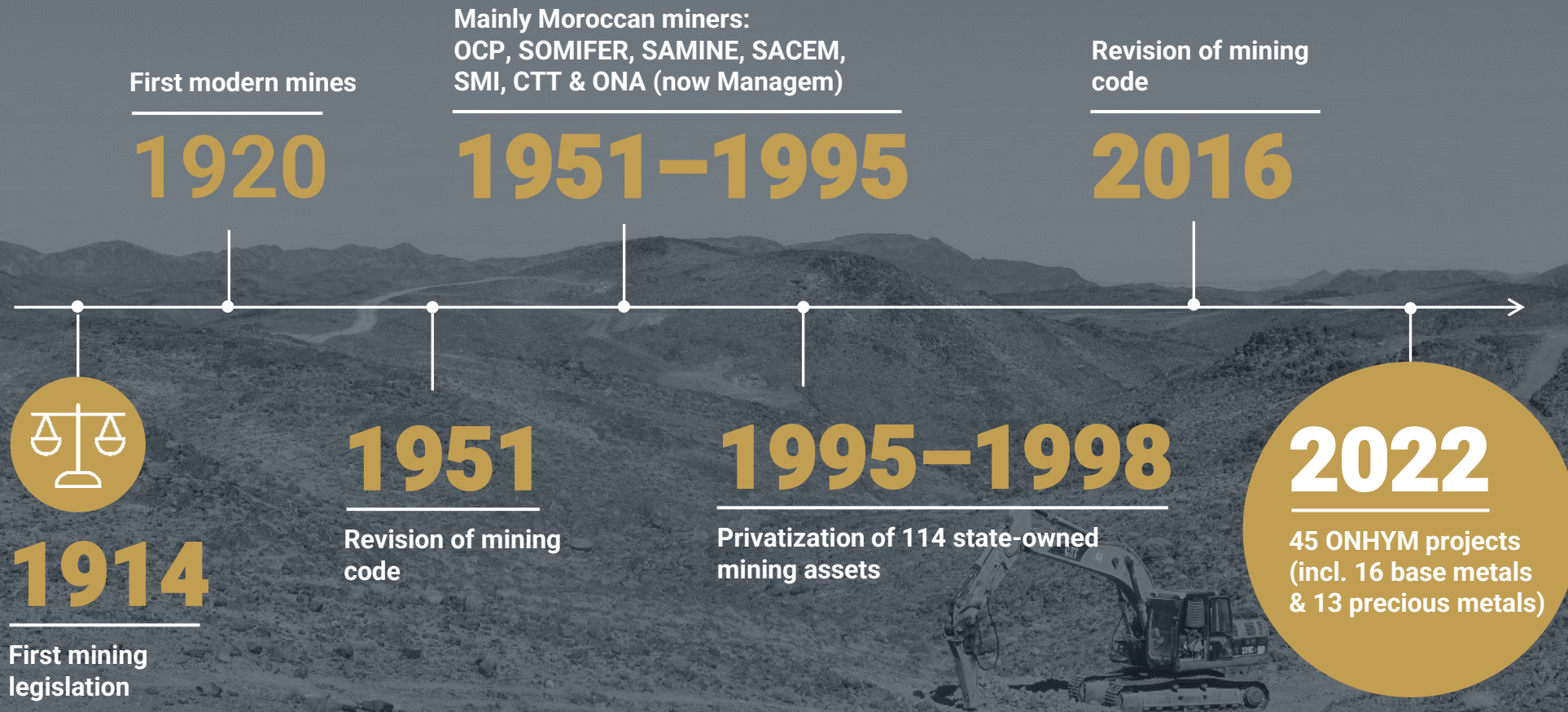


#27 Investment Attractiveness Global Index  
#12 Policy Perception Global Index

Fraser Institute Annual Survey of Mining Companies, 2023



# Morocco / Developing the Mining Sector



| Baseline Mining Code Zgounder |             |
|-------------------------------|-------------|
| Royalty                       | 3% of sales |
| Tax rate                      | 32%         |
| State free-carried interest   | Nil         |
| Foreign ownership permitted   | Yes         |
| Repatriation of profits       | Yes         |
| Mining permit (renewable)     | 10 years    |

# Our Assets / Morocco-Focused, Quality Growth Portfolio

## Zgounder Silver Mine – Cornerstone of Aya’s Growth Story

- 2023 production of **1.97M oz**
- 2024 guidance **to be updated in November 2024**
- **96M** oz M&I resources at 306 g/t Ag<sup>1</sup>

## Aya Development Upside

- Boumadine – gold, silver, lead and zinc
  - **34M** oz Ag<sub>eq</sub> indicated resources at **515 g/t** Ag<sub>eq</sub>
  - **318M** oz Ag<sub>eq</sub> inferred resources at **420 g/t** Ag<sub>eq</sub>

## Aya Exploration Upside

- Zgounder Regional & Tirzzit
- Imiter bis
- Azegour

## Maximizing Gold Exploration Potential Through Mx2<sup>3</sup>

- Amizmiz
- Tijirit

<sup>1</sup>NI 43-101 Technical Report and Updated Mineral Resource Estimate of the Zgounder Silver Project, Kingdom of Morocco (December 13, 2021)

<sup>2</sup> NI 43-101 Technical Report and Updated Mineral Resource Estimate of the Boumadine polymetallic Project, Kingdom of Morocco (May 8, 2024)

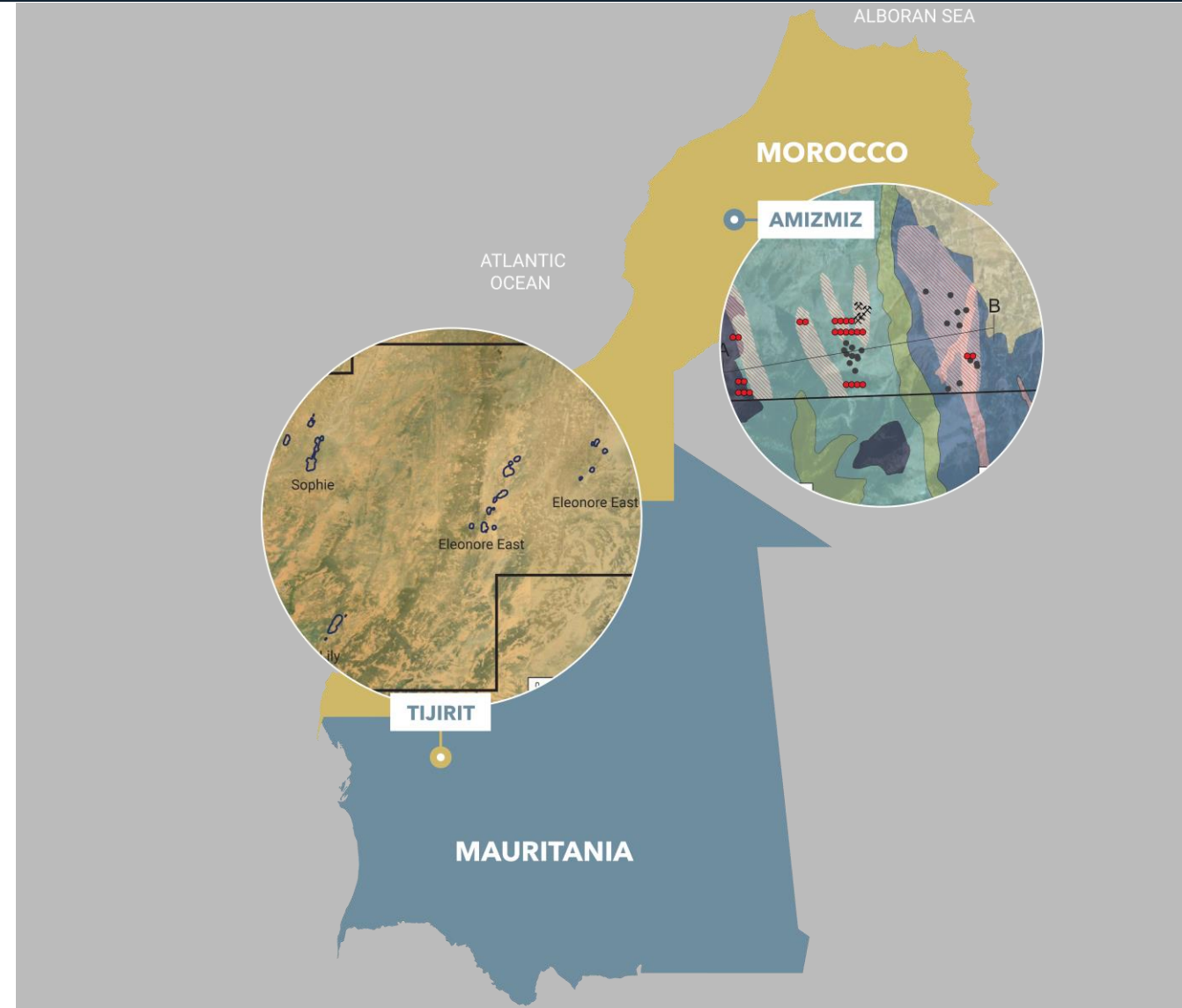
<sup>3</sup> Refer to Aya Gold & Silver’s September 12, 2024 press release



# Spinout of Gold Assets / Unlocking Value from Non-Core Gold Projects

## Creation of Mx2 Mining, a North African-dedicated gold growth company backed by Aya<sup>1</sup>

- **Amizmiz Gold Project (Morocco):**
  - Historic resource of 342,000 oz at 12.98 g/t Au
  - 2,400m drill program underway
- **Exclusive option to acquire Tijirit Gold Project (Mauritania):**
  - Measured and indicated mineral resources of 292,600 oz at 2.19 g/t Au and an inferred mineral resource of 533,200 oz at 1.63 g/t Au.
  - Mx2 can maintain option by covering minimum spend requirements for 3 years.
- **Experienced Aya team and board, and senior mining executives from Red Back Mining, Orca Gold, and Montage Gold.**
  - Mx2 will carry out a non-brokered private placement of a minimum of \$7.5M
  - Aya will contribute \$1M
- **Aya to receive \$10M in share consideration from Mx2 through the spinout:**
  - Aya to be the largest shareholder of Mx2, focused on untapping the potential of Amizmiz and Tijirit



# Q2-2024 / Robust Quarter in Milestone Year

## Continued advancing Zgounder Mine expansion to plan:

- On budget for commercial production in late Q4-2024
- Stockpile of **309,926t** of ore at quarter-end for commissioning of new mill

## Delivered a more typical Zgounder performance:

- Produced **432,667oz**, due to increased access to fresh ore from the open pit
- Generated record revenue of **\$13.7M**, a result of selling Q1-2024 silver concentrate inventory and a higher average net silver price per oz
- Net income of \$6.8M (diluted EPS of \$0.05)
- Total cash cost<sup>1</sup> of \$17.85 per oz sold

## Strengthened liquidity:

- Closed the quarter with **\$103M** in cash and cash equivalents<sup>1</sup>
- Drew down \$15M of the EBRD loan, for a total of \$100M to date

## Ongoing positive results from exploration programs:

- Confirmed high-grade mineralization at depth and doubled Zgounder drill program to 30,000m to follow up
- Extended Boumadine Main Trend to **5.4km** and acquired 7 new permits
- Identified multiple potentially **highly conductive** anomalies to the west and south of Boumadine Main Trend

<sup>1</sup> Non-GAAP Measures, refer to page 25 of the Corporation's Second Quarter 2024 MD&A



**+95%**

Of Zgounder expansion complete



**432.4koz**  
produced



**+42%**

Increase in revenue YoY



**100%**

Zgounder drill program  
increased

# Industry-Low Discovery Costs

- Ag resource as a unit of total shares outstanding up **>7x** to **448Moz Ag<sub>eq</sub>** since Q2-2020
- Industry-low discovery cost of **\$0.10** and industry-high Ag<sub>eq</sub> per share growth



*\*NI 43-101 Technical Report and Updated Mineral Resource Estimate of the Zgounder Silver Project, Kingdom of Morocco (December 13, 2021)*

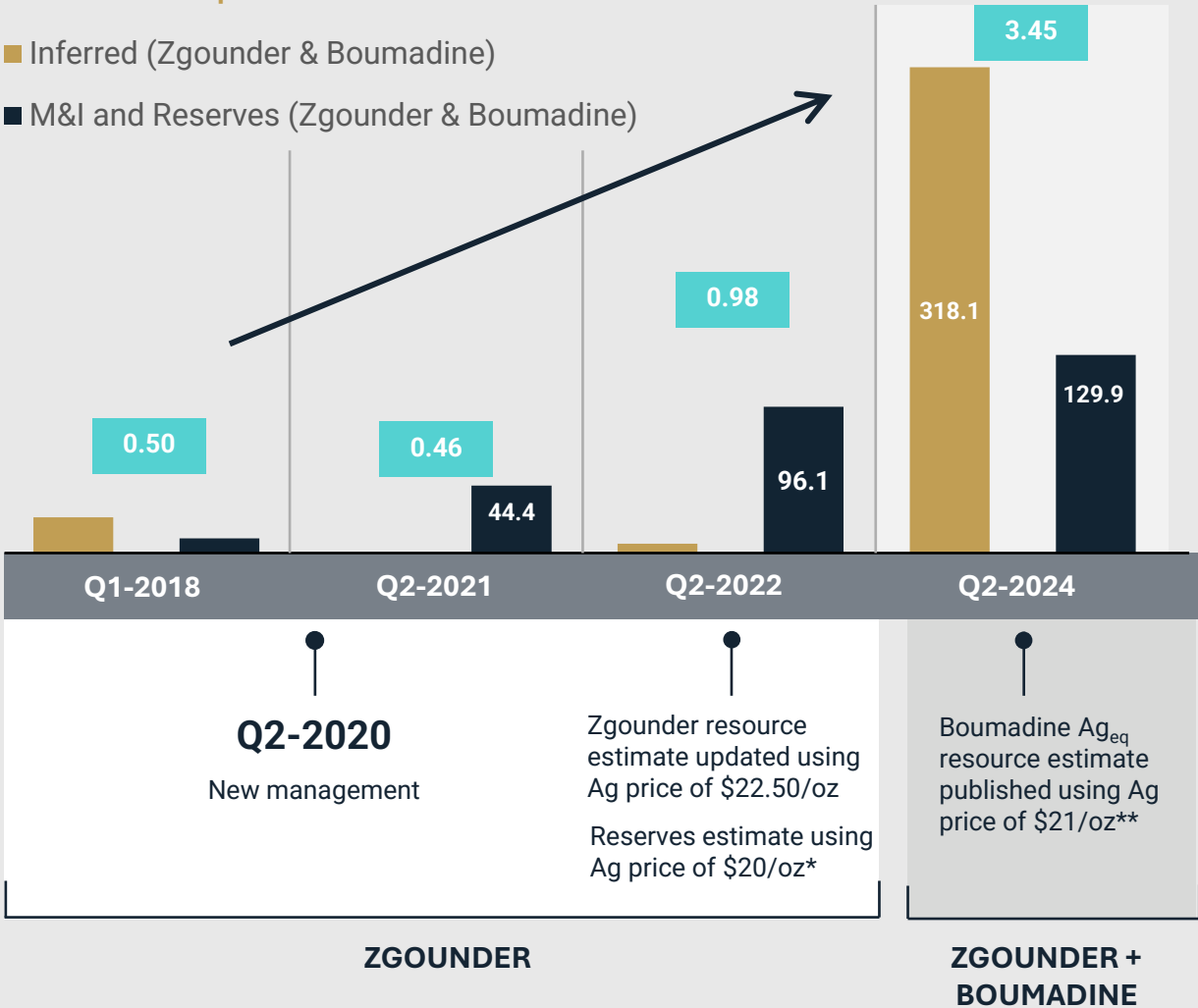
*\*\*See news release dated April 16, 2024, announcing updated NI 43-101 resource for Boumadine..*

Mineral resources are not mineral reserves and the economic viability of resources that are not mineral reserves has not been demonstrated. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to an indicated or measured mineral resource category.

## In Moz Ag<sub>eq</sub>

■ Inferred (Zgounder & Boumadine)

■ M&I and Reserves (Zgounder & Boumadine)

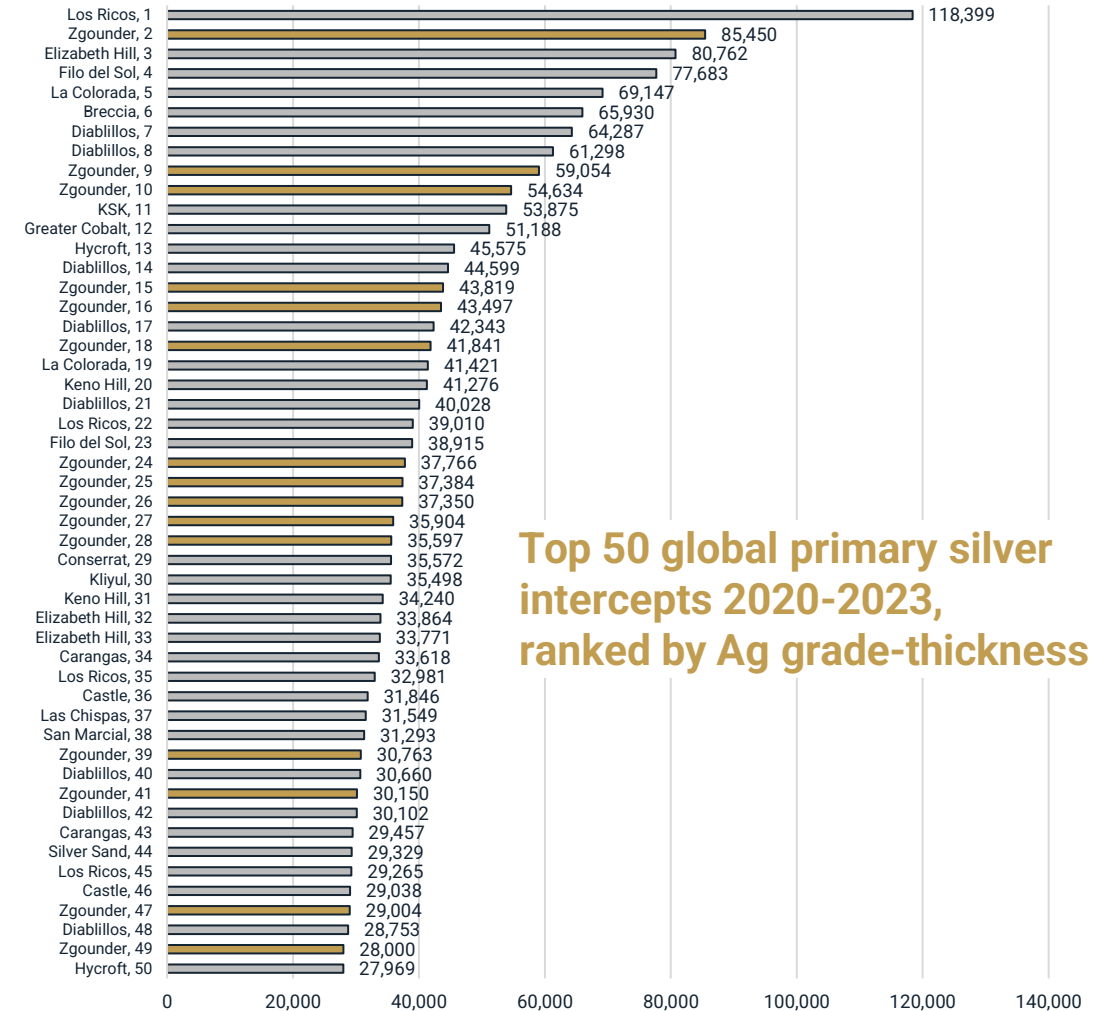
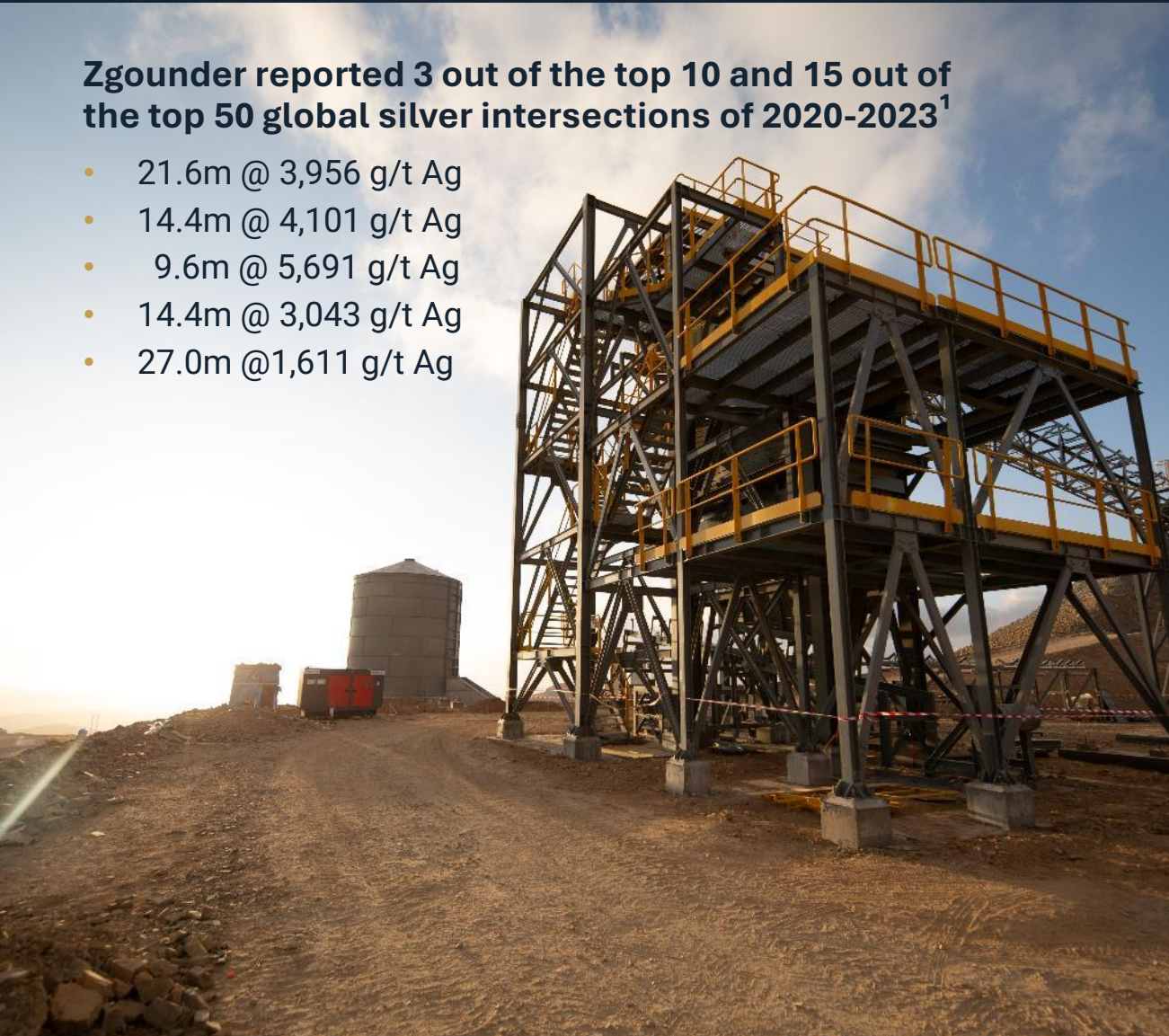


Note 76.9M, 96.7M, 104.9M, and 130M total shares outstanding in Q1-2018, Q2-2021, Q1-2022, and Q2-2024, respectively  
Only Zgounder resources and reserves are accounted for between Q1-2018 and Q2-2022.  
Q2 2024 includes resources from Zgounder and Boumadine and reserves from Zgounder.

# Zgounder / Top Silver Intercepts Globally

Zgounder reported 3 out of the top 10 and 15 out of the top 50 global silver intersections of 2020-2023<sup>1</sup>

- 21.6m @ 3,956 g/t Ag
- 14.4m @ 4,101 g/t Ag
- 9.6m @ 5,691 g/t Ag
- 14.4m @ 3,043 g/t Ag
- 27.0m @ 1,611 g/t Ag



Source: Desjardins Capital Markets, S&P Global Market Intelligence

## Silver Reserves

- The reserves include drilling carried out between January and September 2021
- Reserves include **29%** open-pit and **71%** underground ore
- Well-positioned to extend the 11-year LOM**, given the 71% resource-to-reserve conversion ratio and that the deposit is open at depth to the granite

<sup>1</sup> Refer to the December 14, 2021, press release entitled "Aya Gold & Silver Grows Measured and Indicated Mineral Resources By 116% at Zgounder"

<sup>2</sup> Refer to the February 22, 2022, press release entitled "Aya Gold & Silver Announces Robust Expansion Feasibility Study for Zgounder"

<sup>3</sup> Refer to June 16, 2022, amended NI 43-101 Technical Report Feasibility Study, Zgounder Expansion Project.

## On a 100% basis. M&I resources shown inclusive of reserves.<sup>1</sup>

|                                           | Tonnes<br>(κ) | Ag<br>(g/t) | Content<br>(Ag K Oz) |
|-------------------------------------------|---------------|-------------|----------------------|
| Proven Reserves                           | 2,100         | 288         | 28,748               |
| Probable Reserves                         | 5,490         | 239         | 42,128               |
| <b>P&amp;P Reserves</b>                   | <b>8,590</b>  | 257         | 70,876               |
|                                           |               |             |                      |
| Measured Resources (Incl. Reserves)       | 3,511         | 347         | 39,183               |
| Indicated Resources (Incl. Reserves)      | 6,254         | 283         | 56,874               |
| <b>M&amp;I Resources (Incl. Reserves)</b> | <b>9,765</b>  | 306         | 96,057               |
| Inferred Resources                        | 196           | 367         | 6,400                |

<sup>1</sup> The mineral reserves were estimated based on a Ag price of \$20/oz and a corresponding COG of 47 g/t for open-pit reserves, 85 g/t for underground reserves, and 44 g/t for historical tailings.

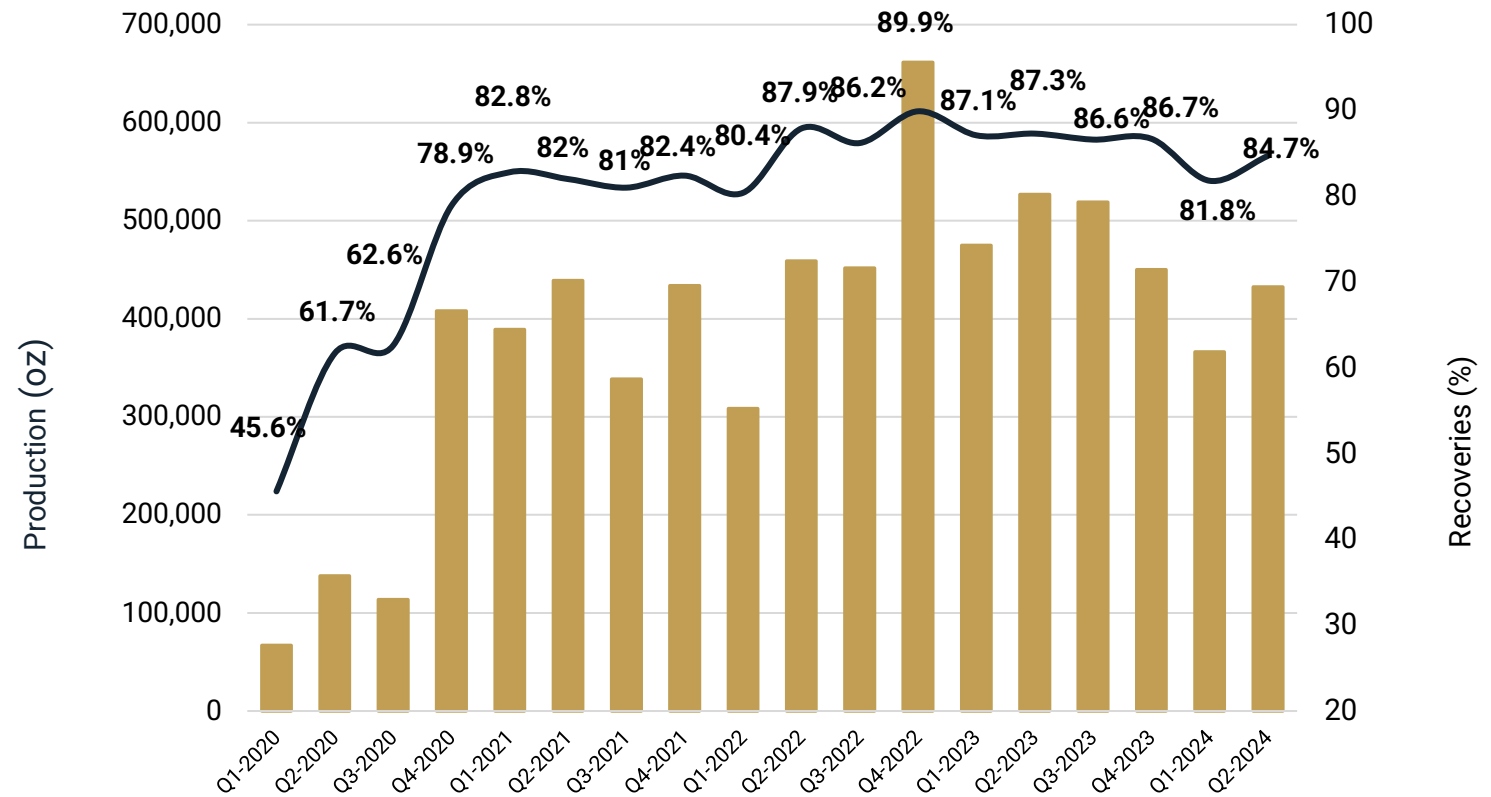
# Zgounder / Strong Execution and Operational Efficiencies

## Solid operational standard reached in 2021 by:

- Switch to cut-and-fill mining method
- Implementation of operating best practices
- Capital infrastructure & equipment upgrades
- Recruitment of key personnel

## Pre-expansion mechanization began in 2022

- Addition of cone crusher increased throughput; 700tpd+ nameplate capacity
- Commissioning of new equipment, such as jumbos, dumpers, scoops, crane & scissor lift platforms
- Improved operational standards
- Block model mining
- Grade control



# Zgounder / Expansion Feasibility Study Highlights



**71Moz**

P&P reserves



**\$373M**

Post-tax NAV<sub>5%</sub>  
(\$22/oz)



**\$139.4M**

Growth capex



**\$9.58**

AISC (LOM)



**11-year**

LOM



**48%**

Post-tax IRR  
(\$22/oz)



**1.7-year**

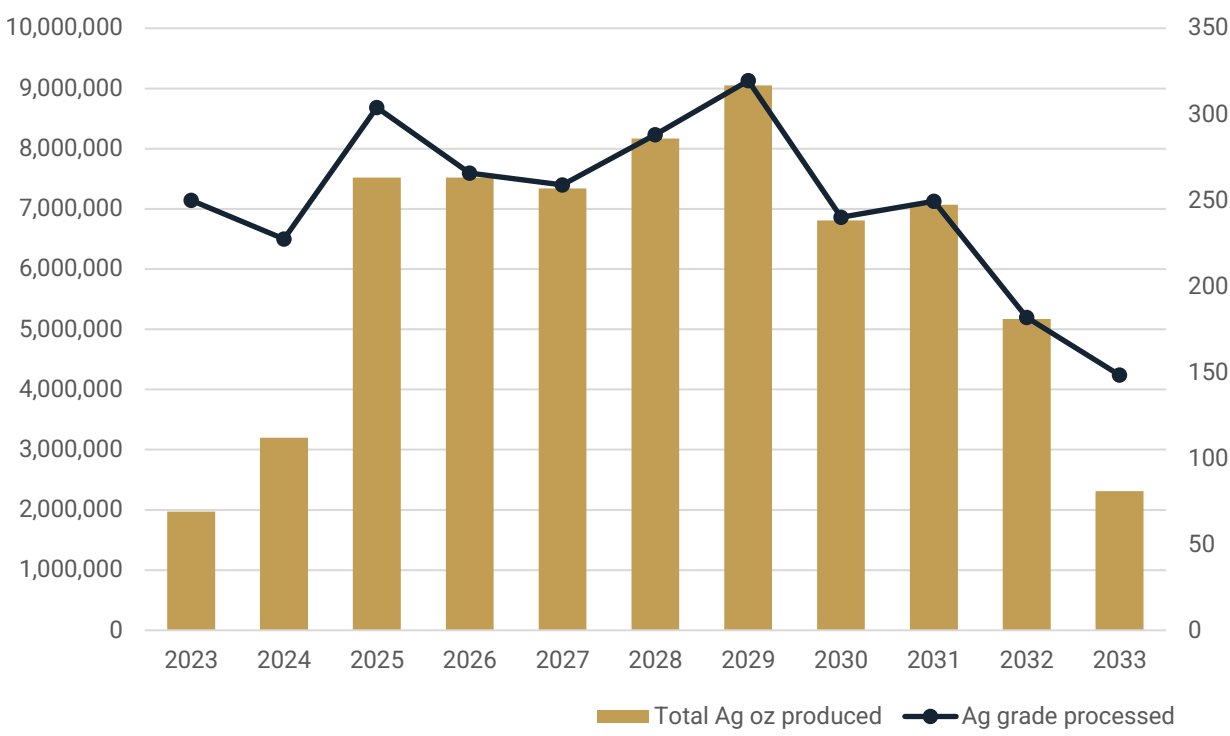
Payback  
(post-expansion)



**ESG**

Plan  
enhancements

## LOM Production Profile\*



\* Based on projections of 2022 Zgounder Expansion feasibility study. Projections include commencement of construction in Q2-2022. 2024 production has been adjusted to 2024 guidance.

# ZGOUNDER MINE | Open-pit production

Combined open-pit and UG production to average 6.8M oz silver per year, when in full production

## Expanded operations will combine:

- 2,000 tpd Merrill-Crowe plant and 700 tpd flotation-cyanidation plant
- Open-pit & UG operations

EXISTING TAILINGS  
STORAGE FACILITY

NEW PROCESS PLANT

OPEN PIT

HISTORICAL TAILINGS  
STORAGE FACILITY



# Zgounder Expansion / Commercial Production Planned for Q4-2024

## On budget:

- On track to complete expansion within the capital cost estimate

## Underground development on track:

- 96% of lateral and 83% of vertical development completed

## Progressing to plan:

- Electrical works, instrumentation; Merrill Crowe, underground workshops, warehouses, backfill station; and silver room building

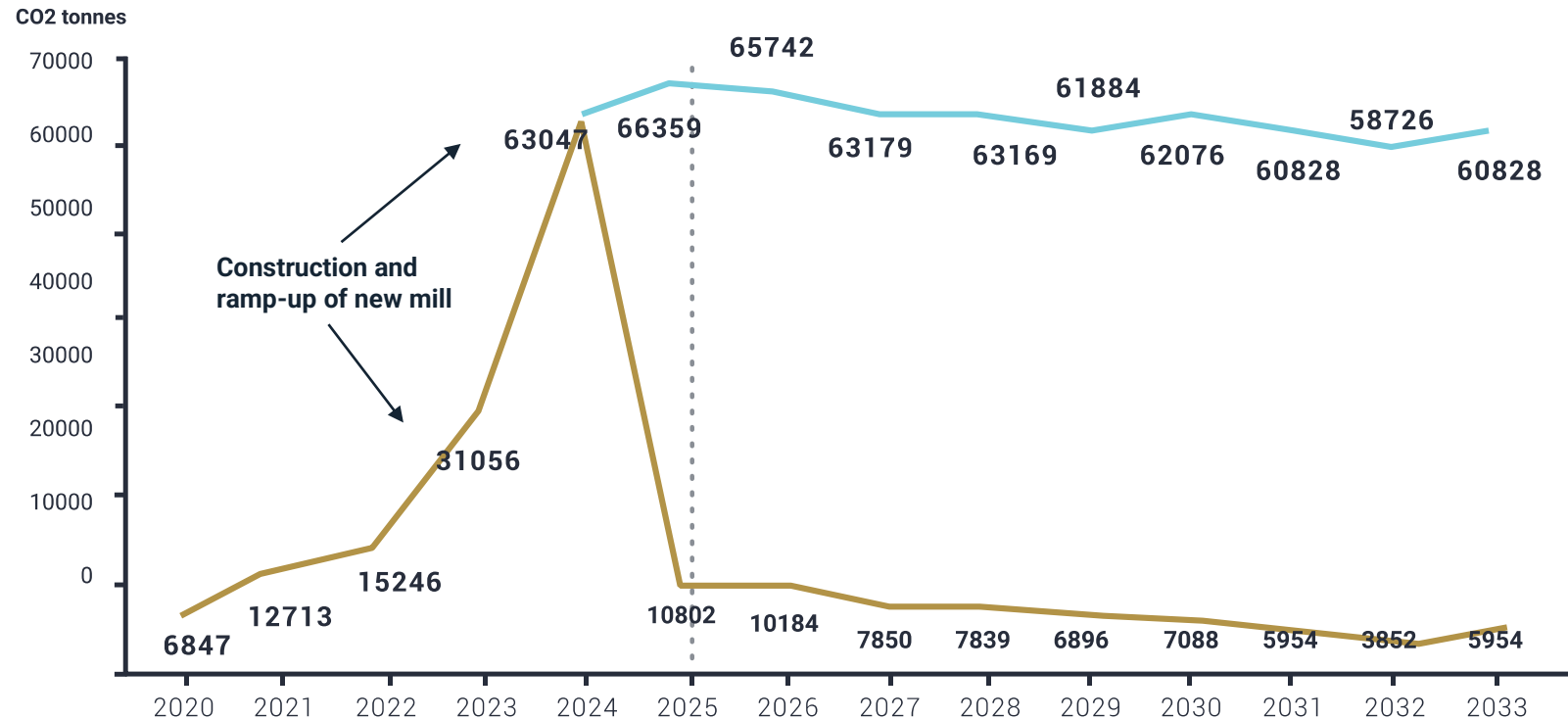
## Completed on schedule:

- Plant civil, concrete and structural works, equipment installation, silver room, electrical powerline, and assay laboratory.
- The entire mining site is now powered with renewable energy from the newly built 60kV power line.
- The water dams and other water storage infrastructures are operational; the new tailings dam is in use.

| Area                           | Q2-2024 |
|--------------------------------|---------|
| Process plant                  | 95%     |
| Underground and open-pit mines | 94%     |
| Tailings                       | 100%    |
| Water management               | 100%    |
| Electrical infrastructure      | 98%     |
| On-site infrastructure         | 96%     |

# Aya / Near-term Decarbonization Objectives

## Estimated total GHG emissions for the Zgounder Silver Mine



**88%**  
Reduction in  
overall emissions  
in 2025<sup>1</sup>

<sup>1</sup> Compared to base year of 2021. Objective does not include Scope 3 emissions.

# Aya / 2024 Drill Program of 160,000m Focusing on Boumadine

## Zgounder Silver Mine

- 15,000m program completed and doubled to **30,000m**
- Follow up promising H1-2024 underground targets

## Boumadine (Development)

- **63,469m** completed of **120,000m** budgeted
  - 60,000m: explore and expand 5.4km strike
  - 60,000m: test new targets
- MobileMT regional survey complete

## Zgounder Regional (Exploration)

- Budget of **10,000m**
- Find similar mineralization to Zgounder deposit; and test Cu-Ag mineralization at Tirzzit

## Amizmiz (Exploration)

- Exploratory drill and fieldwork program starting in Q3
- Term sheet signed with Mx2 Mining for spinout of Amizmiz



# Zgounder / At-Depth Drilling Prioritized on Near-Mine Permits in 2024

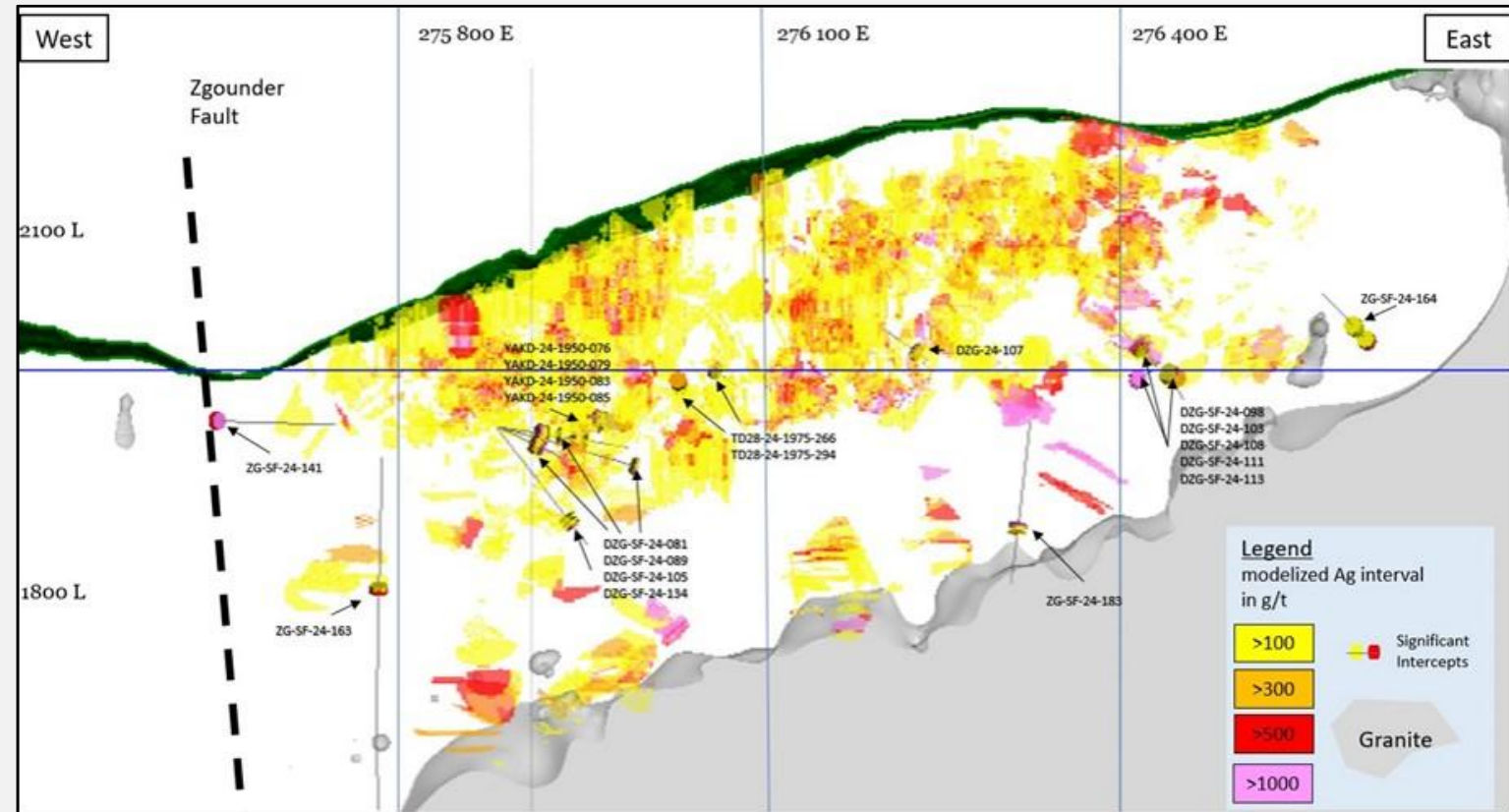
**21,190m completed**; program doubled to 30,000m

Drill results to date **confirm continuity of high-grade silver mineralization at depth** including near the granite contact.

## Recent Drill Result Highlights<sup>1</sup>

- **1,089 g/t Ag over 13.5m**, including 1,700 g/t Ag over 7.5m and 4,469 g/t Ag over 4.5m
- **322 g/t Ag over 17.6m**, including 1,877 g/t Ag over 1.5m
- **2,812 g/t Ag over 8.0m**
- **2,870 g/t Ag over 6.5**, including 7,229 g/t Ag over 2.0m
- **2,227 g/t Ag over 7.0m**, including 6,768 g/t Ag over 2.0m

<sup>1</sup> Refer to Aya Gold & Silver's February 28, September 6, October 12, 2023, March 5, March 28, May 2, July 2 and Sept. 4, 2024 press releases



# Zgounder Regional & Tirzzit / Test Drilling and Geophysics

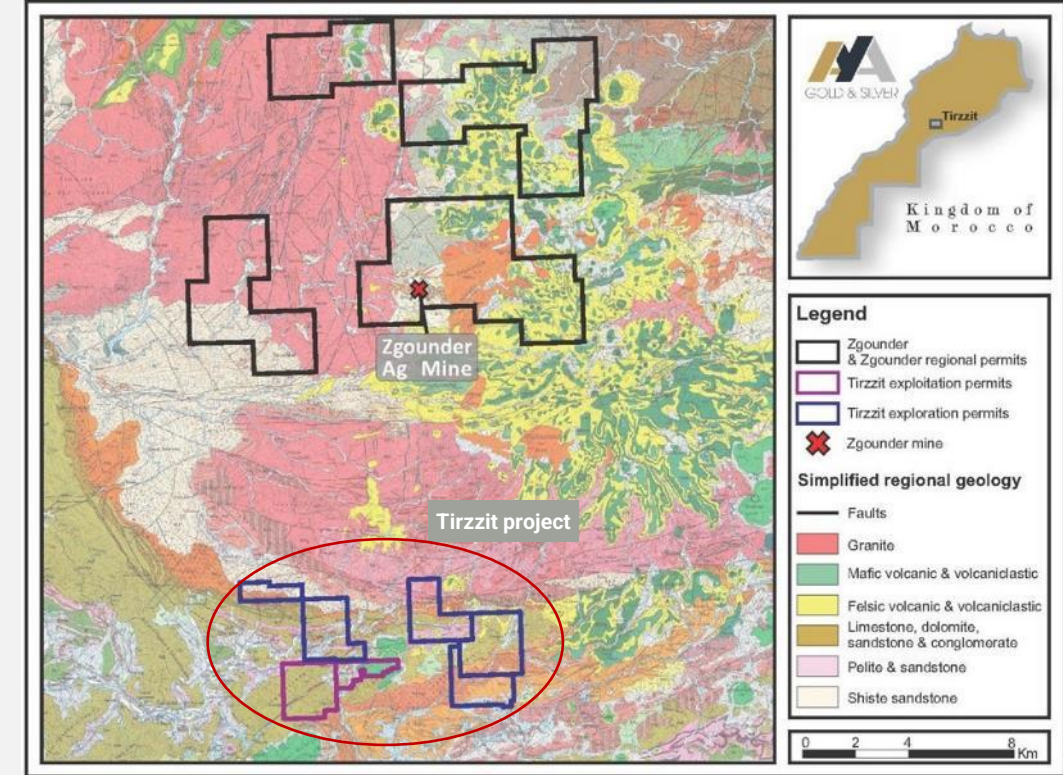
## Zgounder Regional

- Drill testing surrounding permits with similar geological signatures
- Calibrating hyperspectral imaging with grab sample data
- Re-interpreting geophysics data collected in 2022
- Defining new drill targets with structural study results

## Tirzzit<sup>1</sup>

- Historical artisanal copper mine offering near-surface silver and copper mineralization potential
- Collection of 7 permits (67.7km<sup>2</sup>) including the historical Tirzzit Copper Mine on Morocco's Anti-Atlas range, 25 km south of Zgounder
- Airborne regional MobileMT survey completed in H1-2024
- Drill program to test Cu-Ag mineralization in 2024
- 2024 program informed by 2023 fieldwork including stream sediment and mapping campaign and high-resolution hyperspectral survey
- Historical data includes drilling

<sup>1</sup> Refer to Aya Gold & Silver's June 29, 2023 and August 17, 2023 press releases

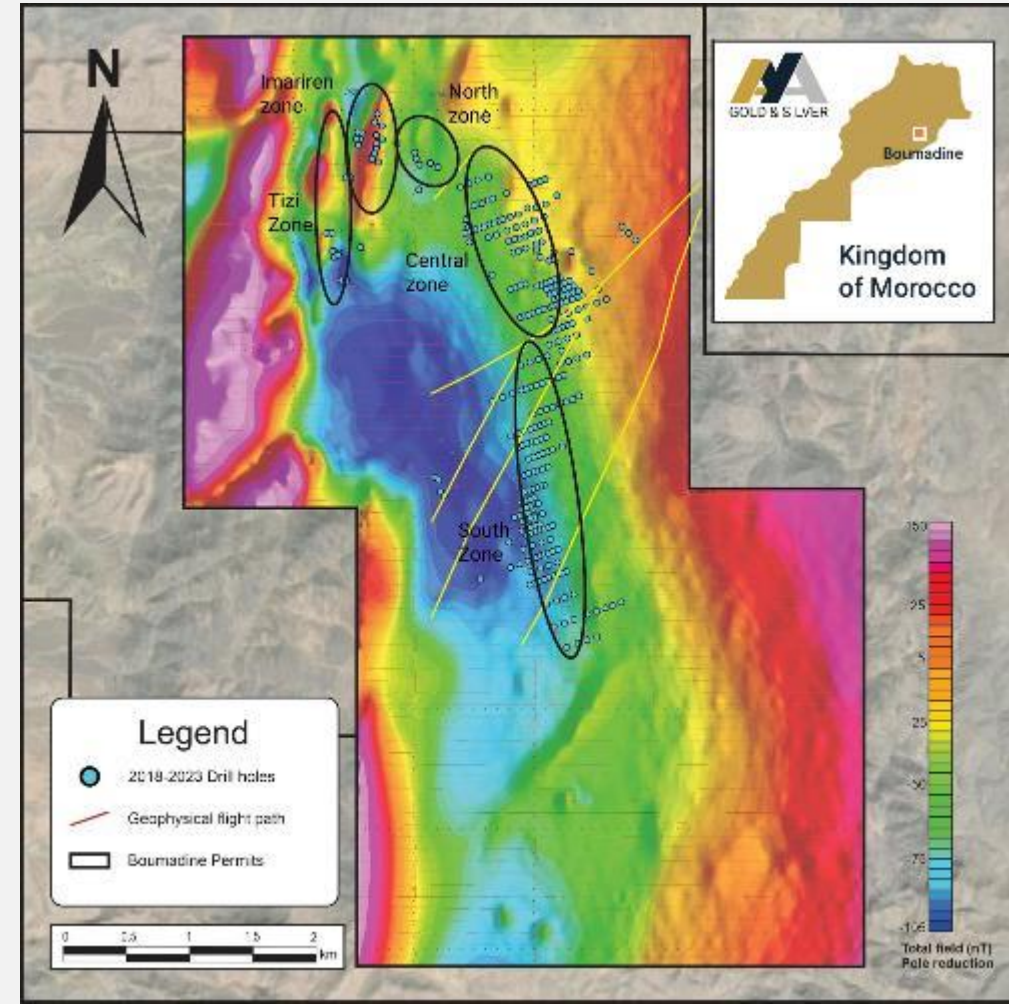


# Boumadine / 2024 Resource Highlights (Ag, Au, Cu, Pb, Zn)

## Highlights<sup>1</sup>

- **Indicated** resources of 2.0Mt at 113 g/t Ag, 2.51 g/t Au, 4.32% Zn and 1.07% Pb containing an estimated **7.4Moz** of Ag, 165koz of Au, 88kt of Zn and 22kt of Pb
- **Inferred** resources of 23.6Mt at 85g/t Ag, 2.62 g/t Au, 2.32% Zn and 0.84% Pb containing an estimated **64.7Moz** of Ag, 1.98Moz of Au, 546kt of Zn and 198kt of Pb
- 41% of the inferred mineral resource is pit-constrained, and 59% is underground
- Rapid resource delineation with **+94 km** drilled in under 2 years
- Potential to **expand the deposit in all directions** – 120,000m program drilling ongoing and less than 10% of the land package has been drilled

<sup>1</sup> Refer to Aya Gold & Silver's April 16, 2024 press release.



# Boumadine / Robust Mineral Resource Estimate<sup>1,2,3</sup> (Au<sub>eq</sub>, Ag<sub>eq</sub>, Cu, Pb, Zn)

Potential to increase deposit in **all** directions

|                           | Cutoff        | Tonnes | Average Grade <sup>2</sup> |       |      |      |      |                  |                  | Contained Metal <sup>2</sup> |       |      |      |      |                  |                  |
|---------------------------|---------------|--------|----------------------------|-------|------|------|------|------------------|------------------|------------------------------|-------|------|------|------|------------------|------------------|
|                           |               |        | Ag                         | Au    | Cu   | Pb   | Zn   | Ag <sub>eq</sub> | Au <sub>eq</sub> | Ag                           | Au    | Cu   | Pb   | Zn   | Ag <sub>eq</sub> | Au <sub>eq</sub> |
|                           | NSR<br>US\$/t | (kt)   | (g/t)                      | (g/t) | (%)  | (%)  | (%)  | (g/t)            | (g/t)            | (koz)                        | (koz) | (kt) | (kt) | (kt) | (koz)            | (koz)            |
| Pit-constrained Indicated | 95            | 995    | 145                        | 2.71  | 0.17 | 1.58 | 5.92 | 634              | 7.40             | 4,647                        | 87    | 2    | 16   | 59   | 20,299           | 237              |
| Pit-constrained Inferred  | 95            | 8,474  | 103                        | 2.97  | 0.10 | 0.79 | 2.54 | 475              | 5.54             | 28,087                       | 808   | 8    | 67   | 215  | 129,478          | 1,510            |
| Out-of-pit Indicated      | 125           | 1,046  | 82                         | 2.33  | 0.11 | 0.58 | 2.79 | 402              | 4.69             | 2,751                        | 78    | 1    | 6    | 29   | 13,533           | 158              |
| Out-of-pit Inferred       | 125           | 15,096 | 76                         | 2.42  | 0.07 | 0.87 | 2.19 | 389              | 4.53             | 36,653                       | 1,175 | 11   | 131  | 330  | 188,663          | 2,198            |
| Total Indicated           | 95/125        | 2,042  | 113                        | 2.51  | 0.14 | 1.07 | 4.32 | 515              | 6.01             | 7,398                        | 165   | 3    | 22   | 88   | 33,832           | 395              |
| Total Inferred            | 95/125        | 23,569 | 85                         | 2.62  | 0.08 | 0.84 | 2.32 | 420              | 4.89             | 64,740                       | 1,983 | 19   | 198  | 546  | 318,141          | 3,708            |

<sup>1</sup> As at April 15, 2024

<sup>2</sup> Refer to Aya Gold & Silver's April 16, 2024 press release.

<sup>3</sup> The mineral resource has been estimated based on a Ag price of US\$21/oz with a process recovery of 89%, a Au price of US\$1,900/oz with a process recovery of 85%, a Zn price of US\$1.20/lb with a process recovery of 72%, a Pb price of US\$1.00/lb with a process recovery of 85%, and a Cu price of US\$4.00/lb with a process recovery of 75%.

# Boumadine / 2024 Accelerated Development (Au, Ag, Pb, Zn)

## Through drilling<sup>1</sup>

- 63,469m of **120,000m** budgeted drill program completed
  - **60,000m** – expand 5.4km open-ended strike and infill
  - **60,000m** – test hypotheses and generate new drill targets
- NI 43-101-compliant resource estimate filed in May 2024 that is a strong baseline for further exploration.

## Through fieldwork<sup>1,2</sup>

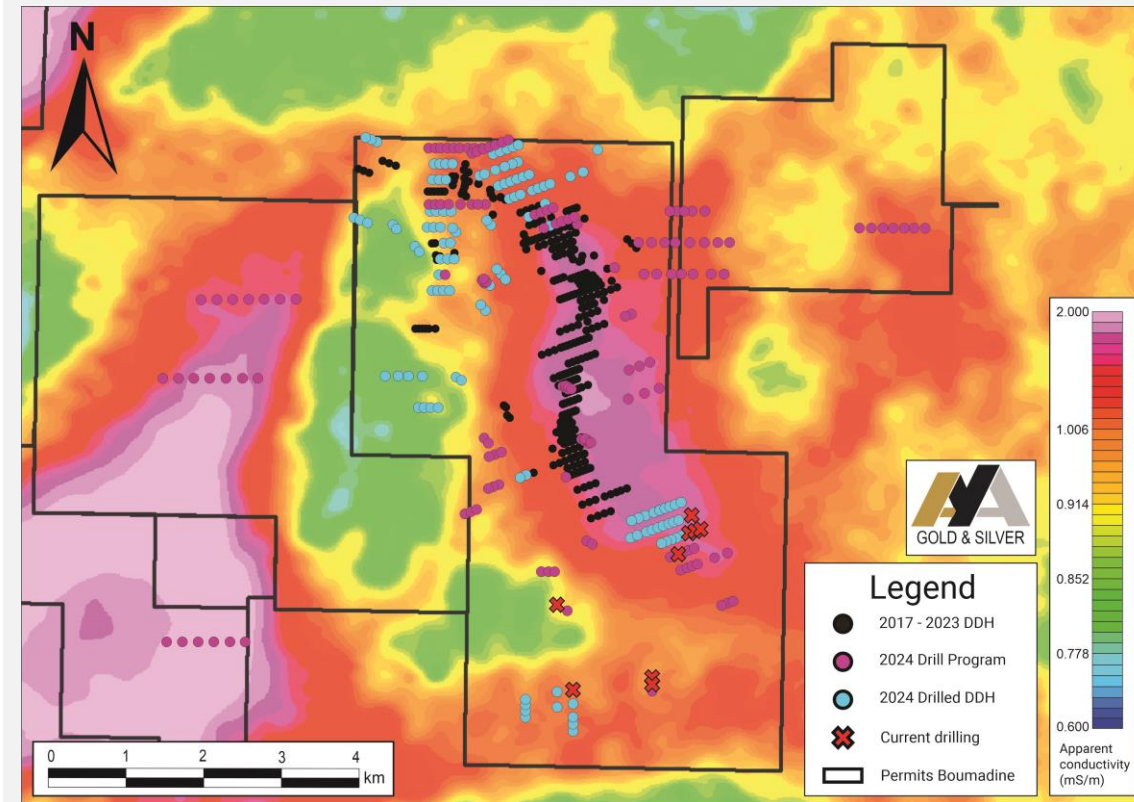
- Mapping and prospecting ongoing on 18 new permits
- Hyperspectral completed on most of the new permits
- Completion of 13,710-line km MobileMT geophysical airborne survey<sup>2</sup>:
- Identified **multiple potentially highly conductive anomalies to the west (5km) and south** of Main Trend
- Series of new N340 and north–south oriented potential conductive anomalies

## Through consolidation

- Land position of **>198km<sup>2</sup>** – a 102% increase YTD

<sup>1</sup> Refer to Aya Gold & Silver's April 19, 2023, July 5, 2023, September 19, 2023, October 12, 2023, November 20, 2023, January 18, 2024, March 19, 2024, March 28, 2024, May 13, 2024, May 31, 2024 and September 16, 2024 press releases.

<sup>2</sup> Refer to Aya Gold & Silver's July 23, 2024 press release.



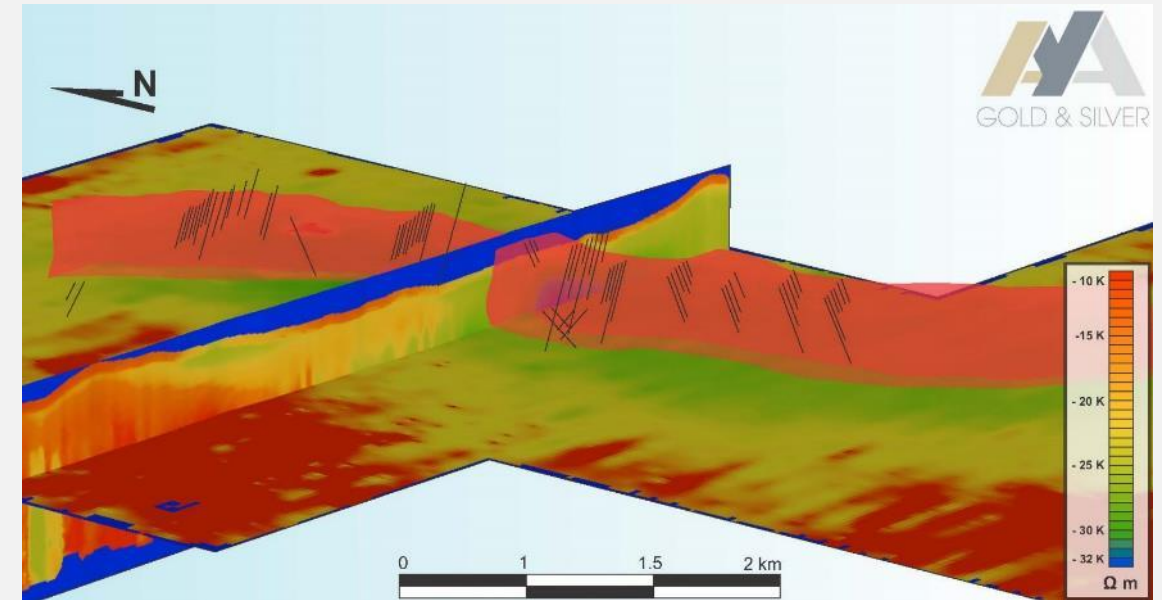
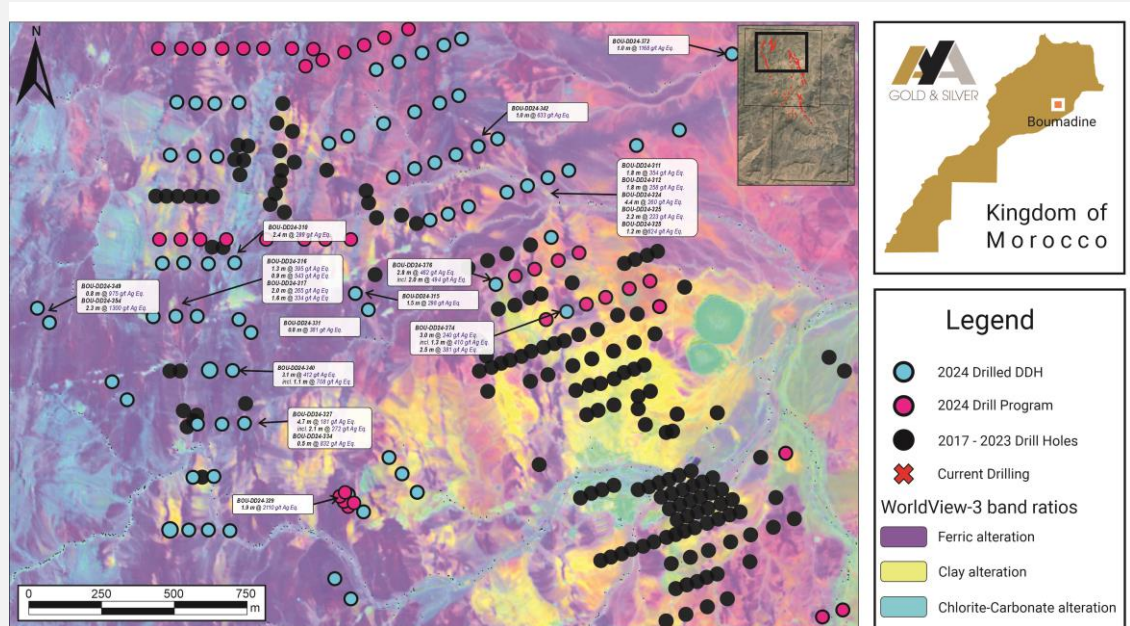
Surface Plan of Boumadine Property with Apparent Conductivity at 175Hz and 2024 Drill Holes

# Boumadine / Expand 5.4KM Strike, Open in All Directions

## Drilling Highlights<sup>1</sup>

- **1,039 g/t AgEq over 23.5m** (6.41 g/t Au, 116 g/t Ag, 4.7% Zn, 0.6% Pb and 0.4% Cu)
- **763 g/t AgEq over 38.3 m** (1.53 g/t Au, 311 g/t Ag, 4.4% Zn, 1.8% Pb and 0.04% Cu)
- **474 g/t AgEq over 30.1m** (2.57 g/t Au, 85 g/t Ag, 2.2% Zn, 0.6% Pb and 0.1% Cu)
- **1,410 g/t AgEq over 9.3m** (12.34 g/t Au, 94 g/t Ag, 2.5% Zn, 0.4% Pb and 0.1% Cu)

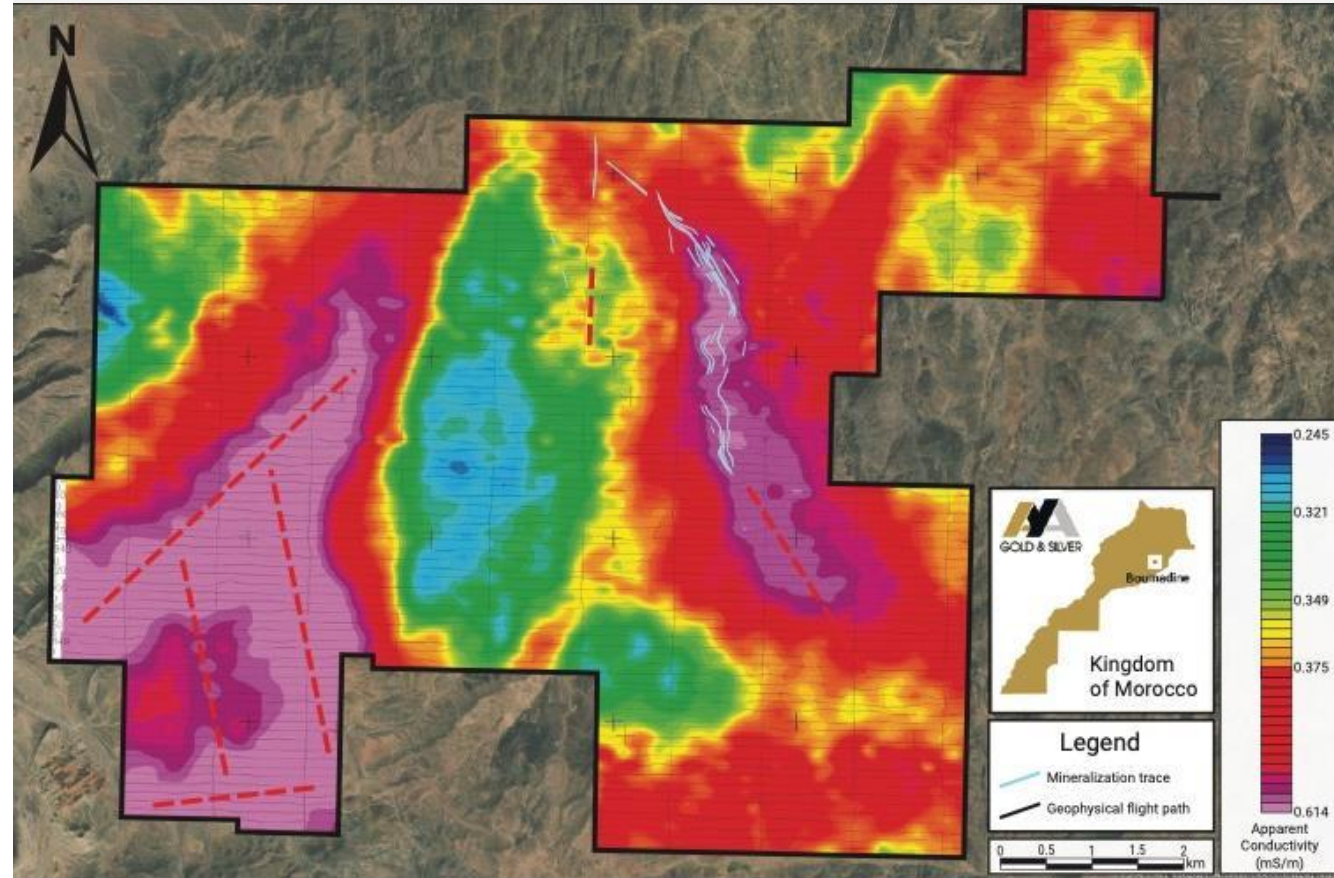
<sup>1</sup>All intersections are in core lengths; Ag equivalent is based on a 100% recovery with the following ratios: 1g/t Au: 93.4 g/t Ag; 1% Cu: 130.4 g/t Ag; 1% Pb: 31.8 g/t Ag; 1% Zn: 54.1 g/t Ag.



# Boumadine / Survey Outlines Multiple Potentially Highly Conductive Anomalies<sup>1</sup>

## 13,710-line km geophysical survey flown over all Boumadine permits

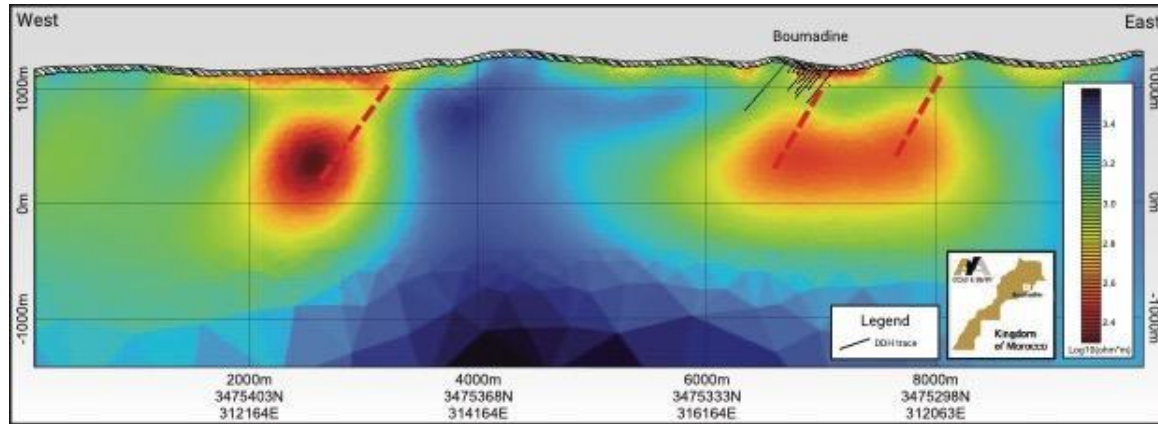
- Very **large, potential conductive anomalies** occurring 5km west of Boumadine, of similar orientation and stronger intensity than the Boumadine Main Trend conductor. This very large system also includes strong potential conductors occurring in an east-west direction.
- Continuation of the Boumadine south main trend anomaly
- Series of new N340 and north-south oriented potential conductive anomalies
- New anomalies will be test-drilled



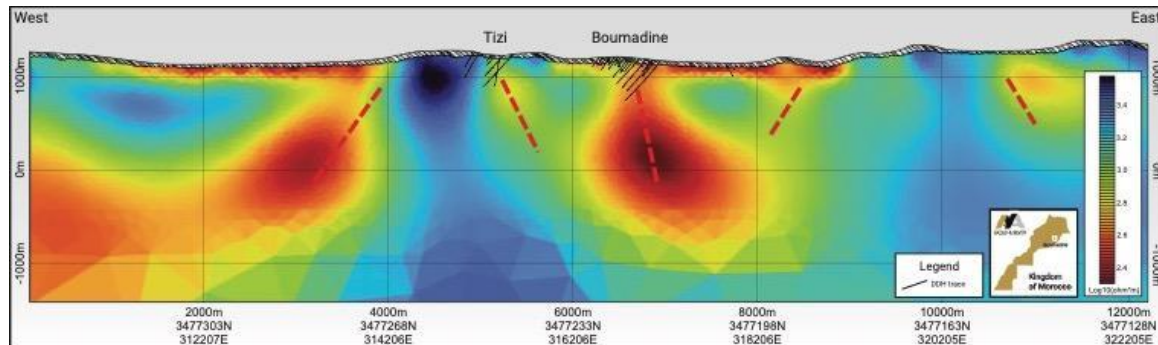
Preliminary Results – Apparent Conductivity at 175Hz (target in dashed red)

<sup>1</sup>Refer to Aya's July 23, 2024 press release

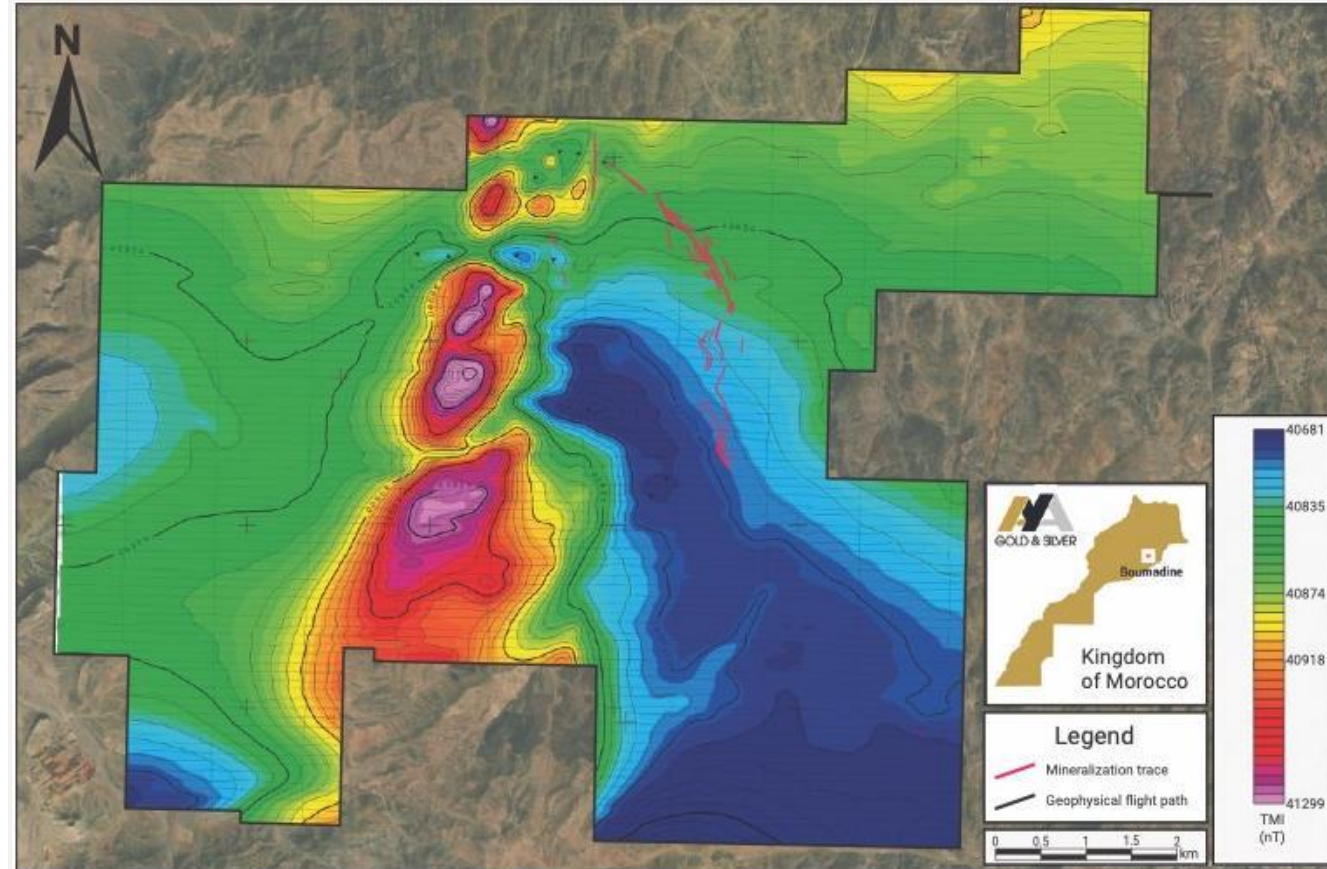
# Boumadine / Expanded Footprint, Multiple New Conductive Anomalies



**Figure – Preliminary Results – Section L2100 Passing through Boumadine – Apparent Conductivity with Drill Holes (target in dashed red)**



**Figure – Preliminary Results – Section L2290 Passing through Boumadine and Tizi – Apparent Conductivity with Drill Holes (target in dashed red)**



**Preliminary Results – Total Magnetic Intensity**

# Aya / Achieving Sustainability Leadership



## Low-Carbon Strategy and Environmental Commitment

**Priorities:** water, tailings management and clean energy. Near-zero Scope 2 emissions in 2025.



**61%**  
Water recycled

**Ongoing**  
Global Industry Standard on Tailings Management



**20-year**  
green PPA signed

**88%<sup>1</sup>**  
Reduction in Scope 2 emissions in 2025



## Health and Safety

**2024 priorities:** consolidating management processes to further embed zero-incident safety culture. Operationalization of mine rescue teams.



**Ongoing**  
Best practices for risk management



**0 fatalities**  
Reported in 2023



**10,760 hours**  
of H&S training in 2023



## Corporate Social Responsibility

**Priorities:** national recruitment and procurement, combined with a four-pronged community program.



**46%**  
Local workforce



**99%**  
National workforce

**75%**  
National procurement



**13,000**  
villagers impacted by medical clinic support

<sup>1</sup> Reduction compared to same year, 2024, in the absence of a signed PPA with a renewable energy producer, as per the mining plan in the NI 43-101 FS study presented in 2022.

# Aya / Implementation of High Governance Standards

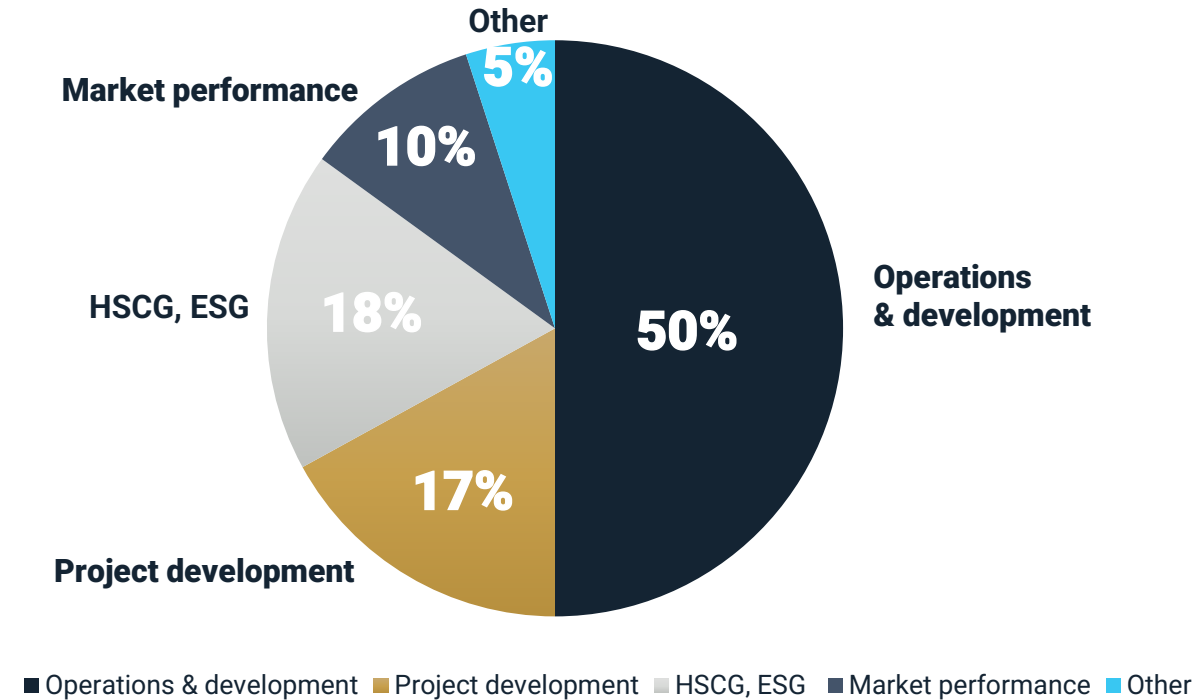
Achieved in the last three years since arrival of new management team

**37%** Women board members

**87%** Director independence

**15%** Board & management holdings  
(As of December 31, 2023)

## Alignment of executive pay to performance and shareholder interests



Implementation of high **governance standards** & alignment of executive remuneration with performance and shareholders

Increased transparency of ESG disclosure in support of the below frameworks:





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