



Unlocking silver growth in Morocco

**INVESTOR
PRESENTATION**

AUGUST 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 and the Company's website at 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 2023 Q4 MD&A, and other filings made with Canadian securities regulatory authorities and available at 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
4. Catalysts



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.



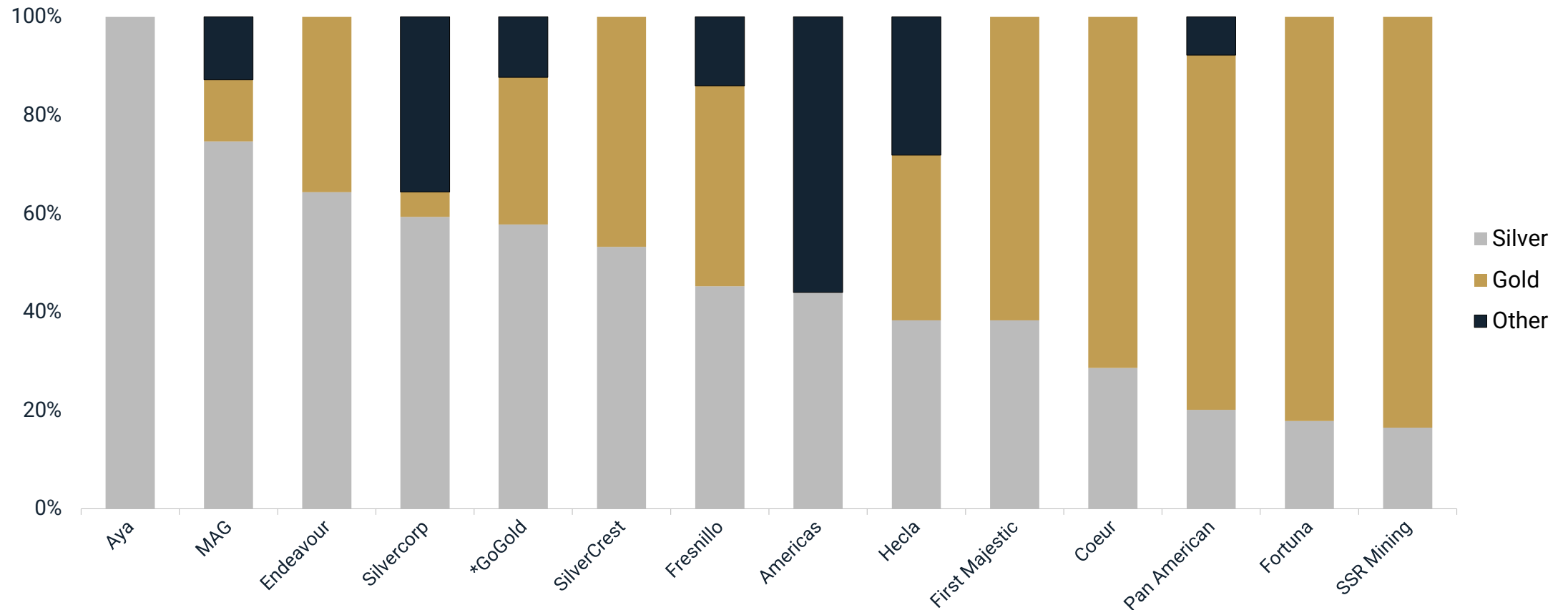
Nikolaos Sofronis
Director

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



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

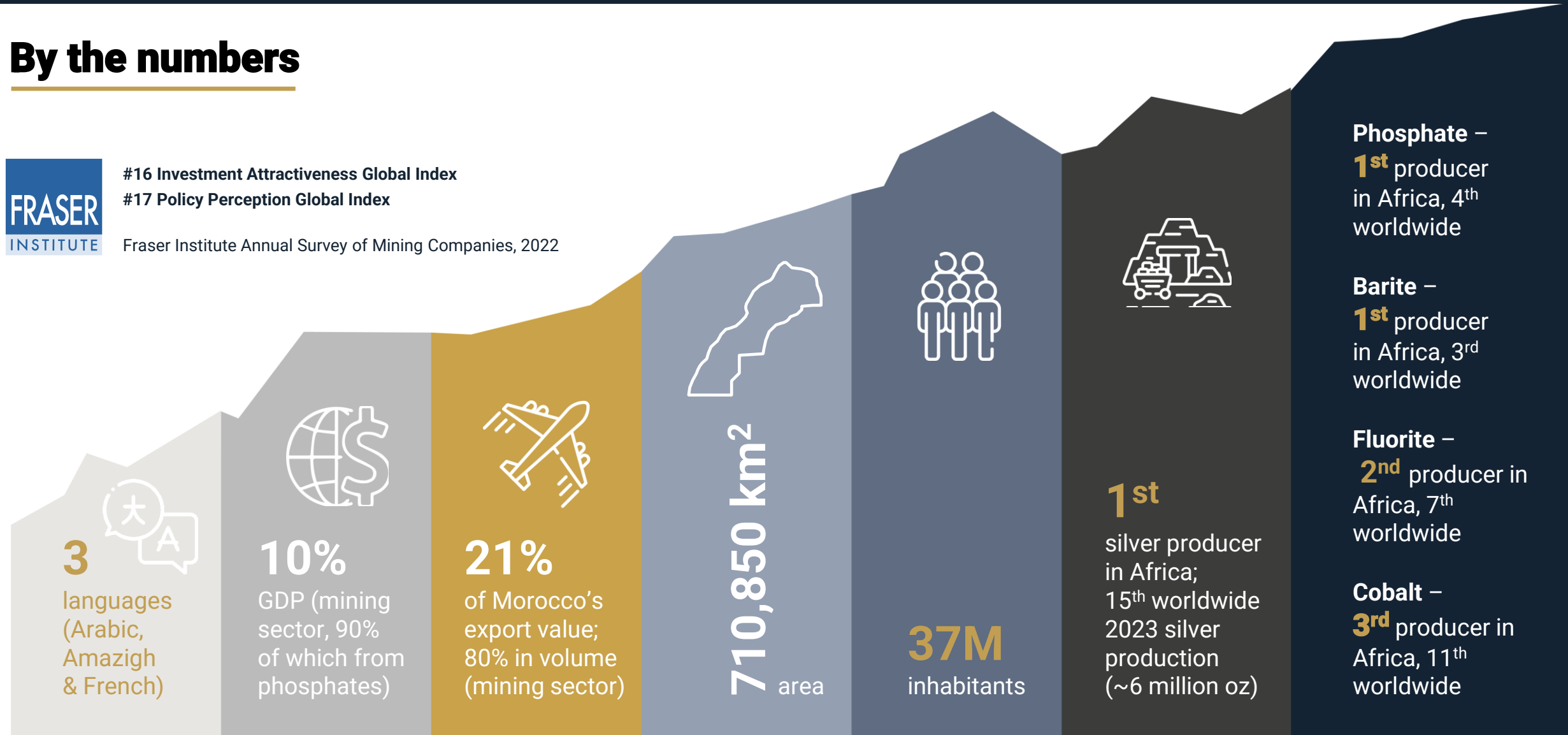
Morocco / Top Mining Jurisdiction

By the numbers

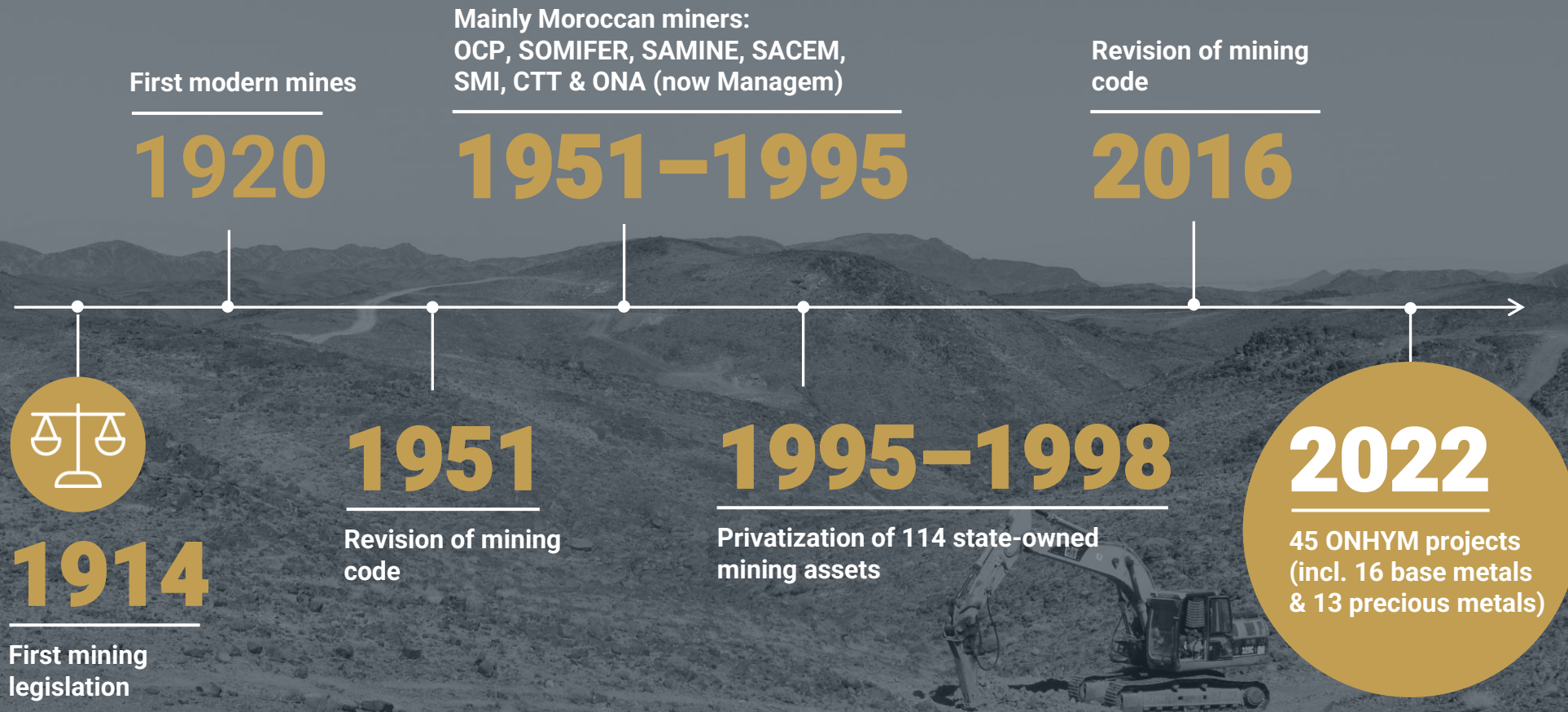


#16 Investment Attractiveness Global Index
#17 Policy Perception Global Index

Fraser Institute Annual Survey of Mining Companies, 2022



Morocco / Developing the Mining Sector



2016 Baseline Mining Code Zgounder	
Royalty	3% of sales
Tax rate*	25%
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 of **2.6M – 3.2M oz Ag**
- Increase in 2024 production due to partial expanded capacity
- **96M** oz M&I resources at 306 g/t Ag*

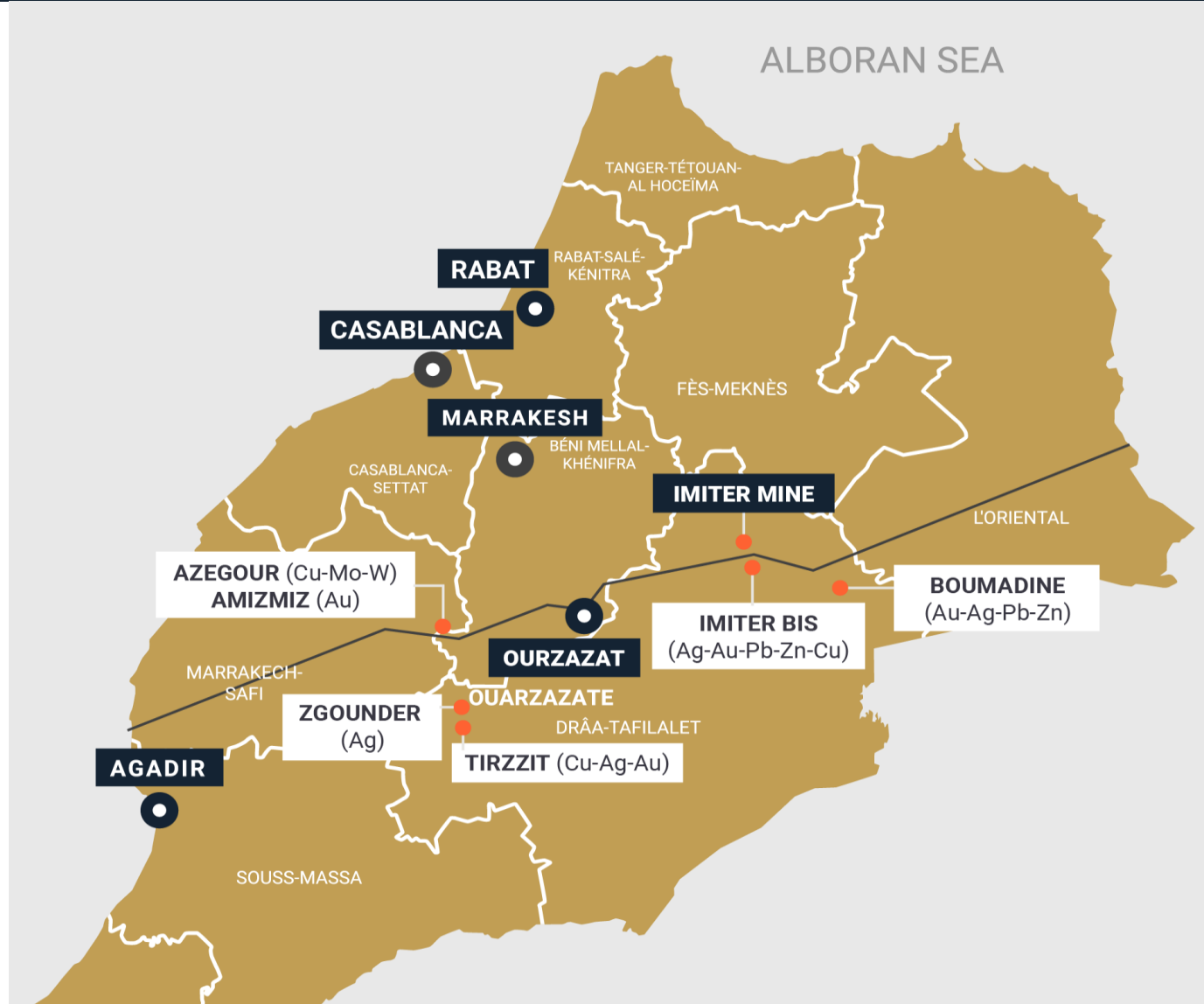
Development Upside

- Boumadine – gold, silver, lead, zinc
- Tijirit – gold

Exploration Upside

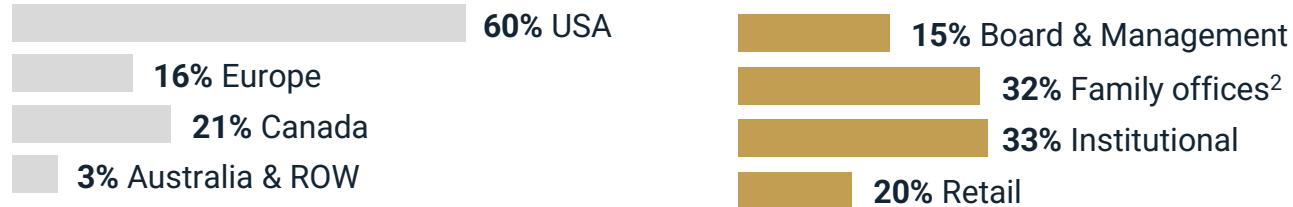
- Zgounder Regional & Tirzzit
- Amizmiz
- Imiter bis
- Azegour

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



Capital Structure / Robust Balance Sheet

Institutional Shareholder Breakdown¹



¹ Based on 42.5M shares institutional ownership

² Affiliated with Aya Board and insiders

Exchanges – TSX: AYA OTCQX: AYASF		
Shares – Basic		130.4M
Shares – F.D.*		136.9M
Share Price (Aug. 13, 2024)	C\$	\$14.14
Market Cap (Aug 13, 2024)	C\$	\$1.86B
Cash (June 30, 2024)**	US\$	\$103M
Debt***	US\$	\$100M
30-day average volume	'000	870

BEST 50
OTC QX
2024

TSX 30
2023

* Includes 5.1M in options and 1.8M RSU/DSU.

** Non-GAAP Measures, consisting of cash and cash equivalents \$85.1M and restricted cash of \$18.3M

*** Fully drawdown on project financing from EBRD



Industry-Low Discovery Costs

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



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

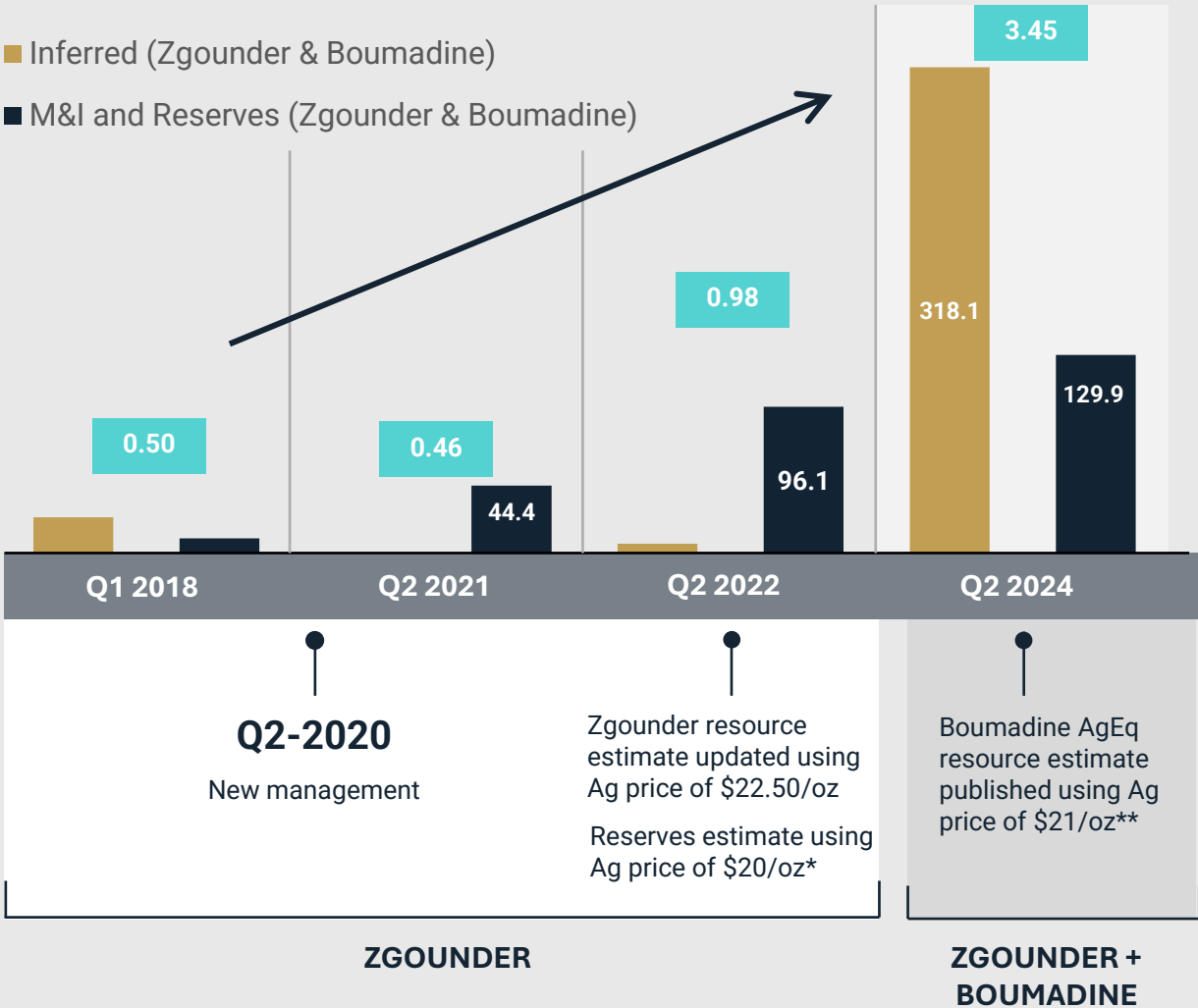
***See news release dated April 16, 2024, announcing updated NI 43-101 resource for Boumadine..*

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 AgEq

■ Inferred (Zgounder & Boumadine)

■ M&I and Reserves (Zgounder & Boumadine)

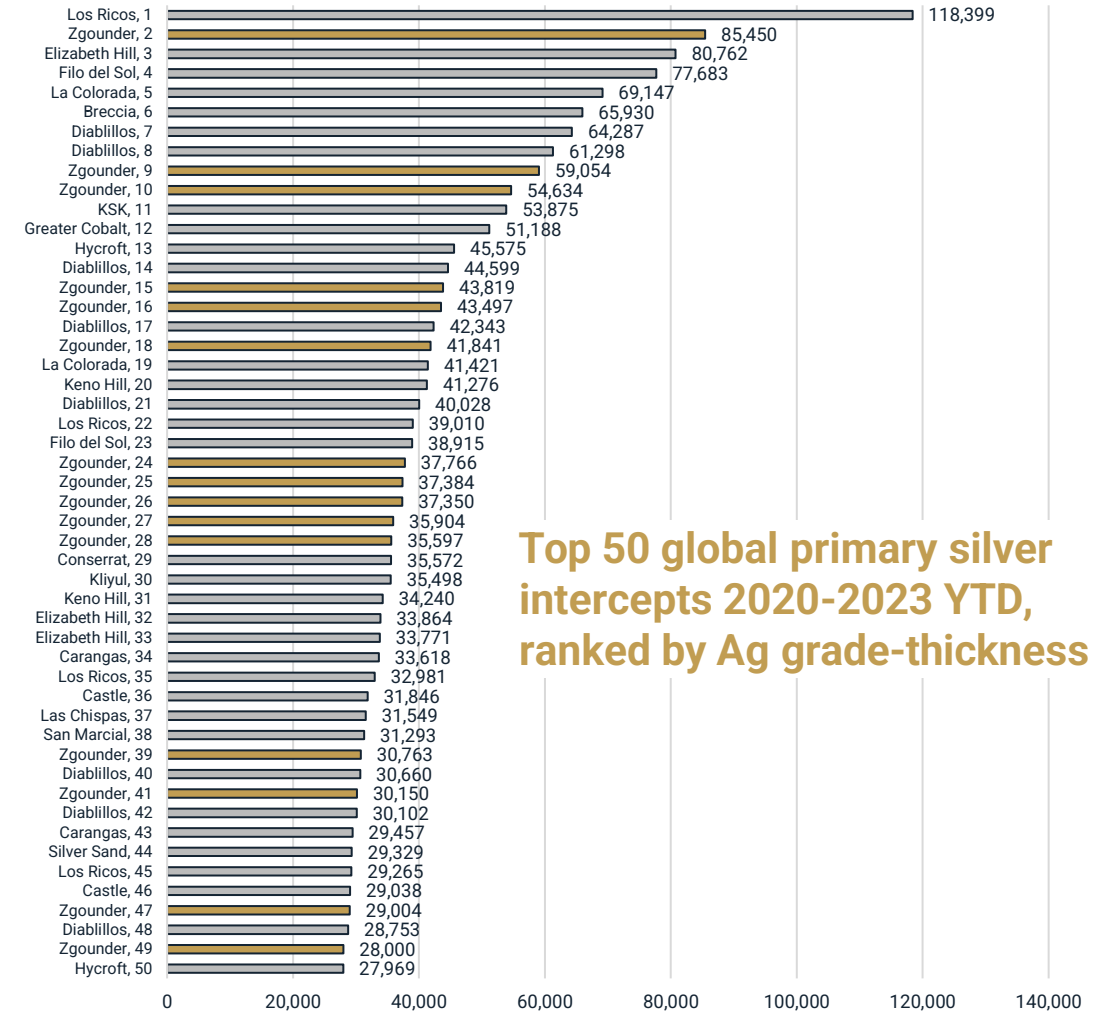
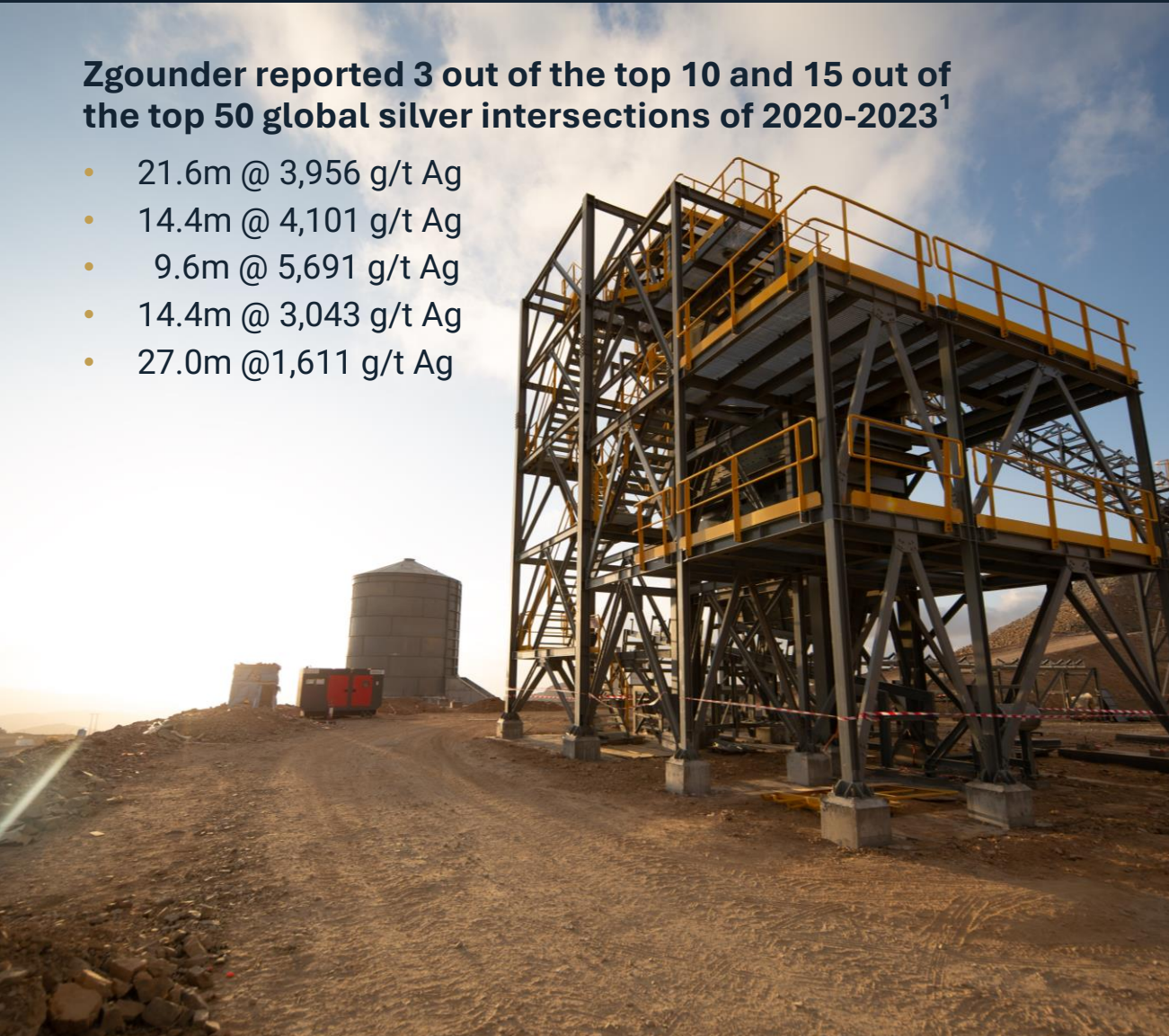


Note 76.9M, 96.7M, 104.9M, and 130M total shares outstanding in Q1-2018, Q2-2021, Q1-2022, and Q2-2024, respectively
Only Zgounder resources and reserves are accounted for between Q1-2018 and Q2-2022.
Q2 2024 includes resources from Zgounder and Boumadine and reserves from Zgounder.

Zgounder / Top Silver Intercepts Globally

Zgounder reported 3 out of the top 10 and 15 out of the top 50 global silver intersections of 2020-2023¹

- 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

Q2- 2024 / Robust Quarter in Milestone Year

Continued advancing Zgounder Mine expansion to plan:

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

Delivered a more typical Zgounder performance:

- Produced **432,667 oz**, 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 cost¹ of \$17.85 per oz sold

Strengthened liquidity:

- Closed the quarter with **\$103M** in cash and cash equivalents¹
- 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 km and acquired 7 new permits
- Identified **multiple potentially highly conductive** anomalies to the west and south of Boumadine Main Trend

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



+95%

Of Zgounder expansion complete



432.4K oz
produced



+42%

Increase in revenue YoY



100%

Zgounder drill program
increased

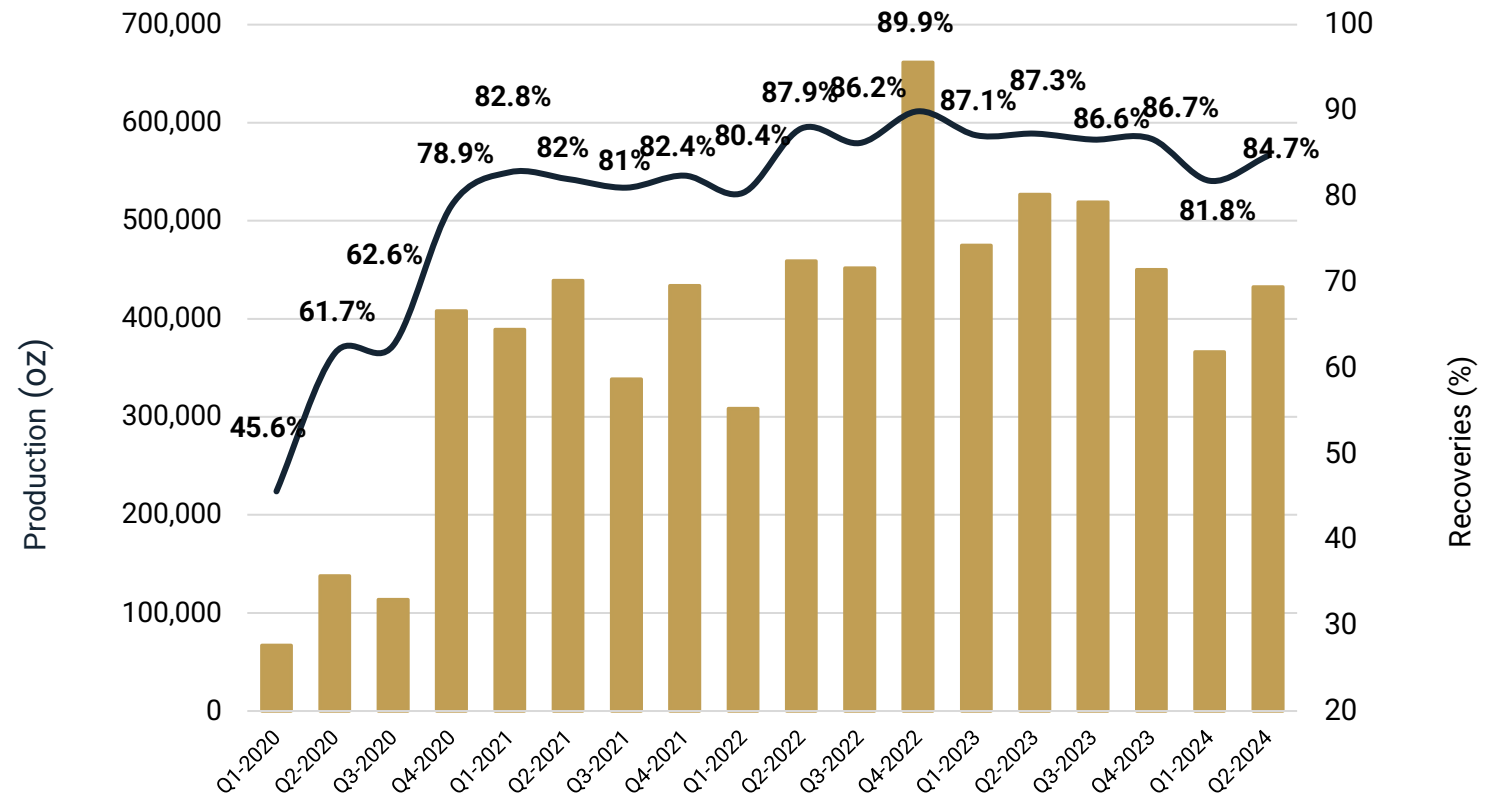
Zgounder / Strong Execution and Operational Efficiencies

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



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

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

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

³ 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.¹

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

¹ 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 / Expansion Feasibility Study Highlights



71Moz

P&P reserves



\$373M

Post-tax NAV_{5%}
(\$22/oz)



\$139.4M

Growth capex



\$9.58

AISC (LOM)



11-year

LOM



48%

Post-tax IRR
(\$22/oz)



1.7-year

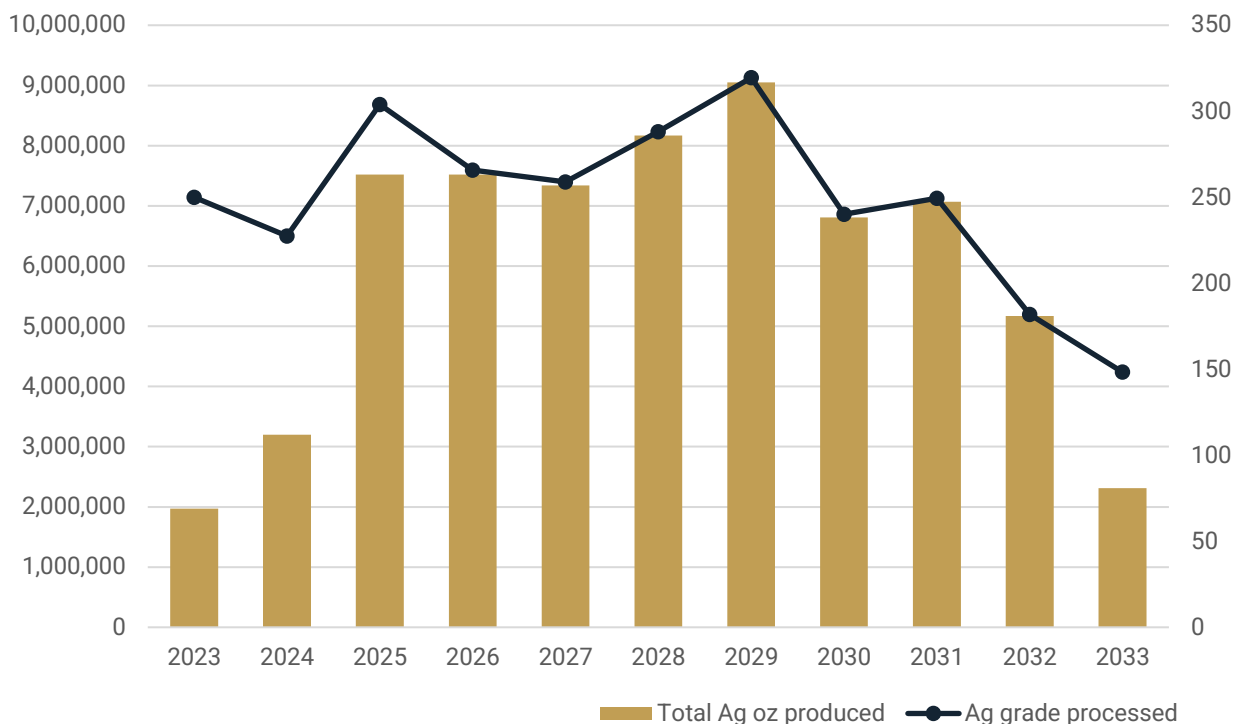
Payback
(post-expansion)



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



CONSTRUCTION OF ZGOUNDER'S NEW PROCESSING PLANT

August 2024



Zgounder Expansion / On Track for Q3-2024 Ore Feed

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 and piping; Merrill Crowe, underground workshops, warehouses, backfill station; and silver room building

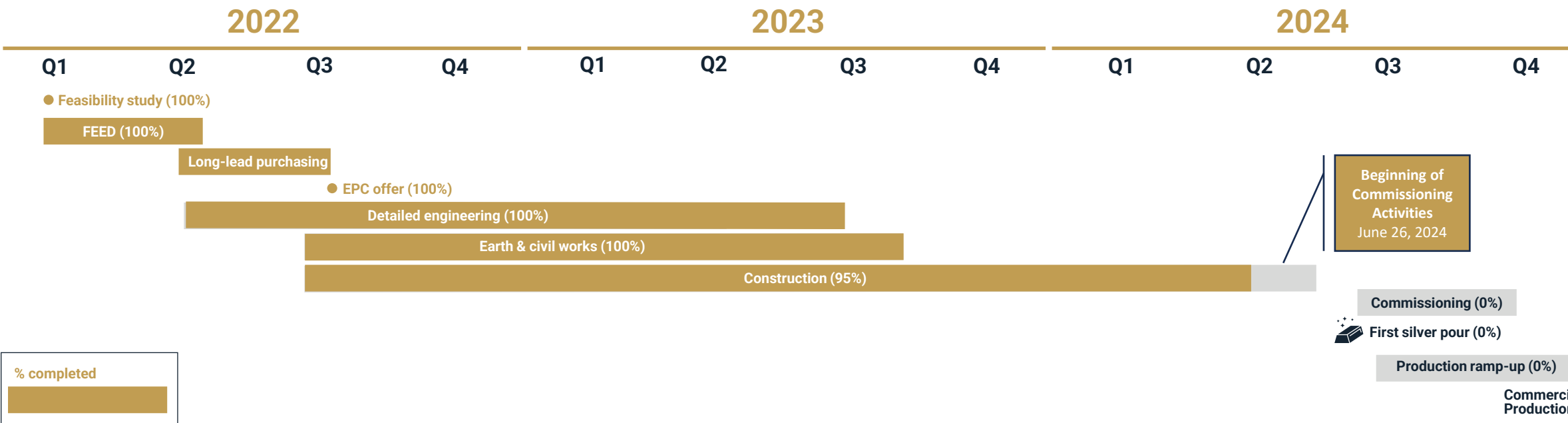
Completed on schedule:

- Plant civil, concrete and structural works, equipment installation, silver room, electrical powerline, and assay laboratory



Area	799,028
Process plant	95%
Underground and open-pit mines	94%
Tailings	100%
Water management	100%
Electrical infrastructure	98%
On-site infrastructure	96%

Zgounder / Expansion Quarterly Spotlight at YE-2023



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%¹
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

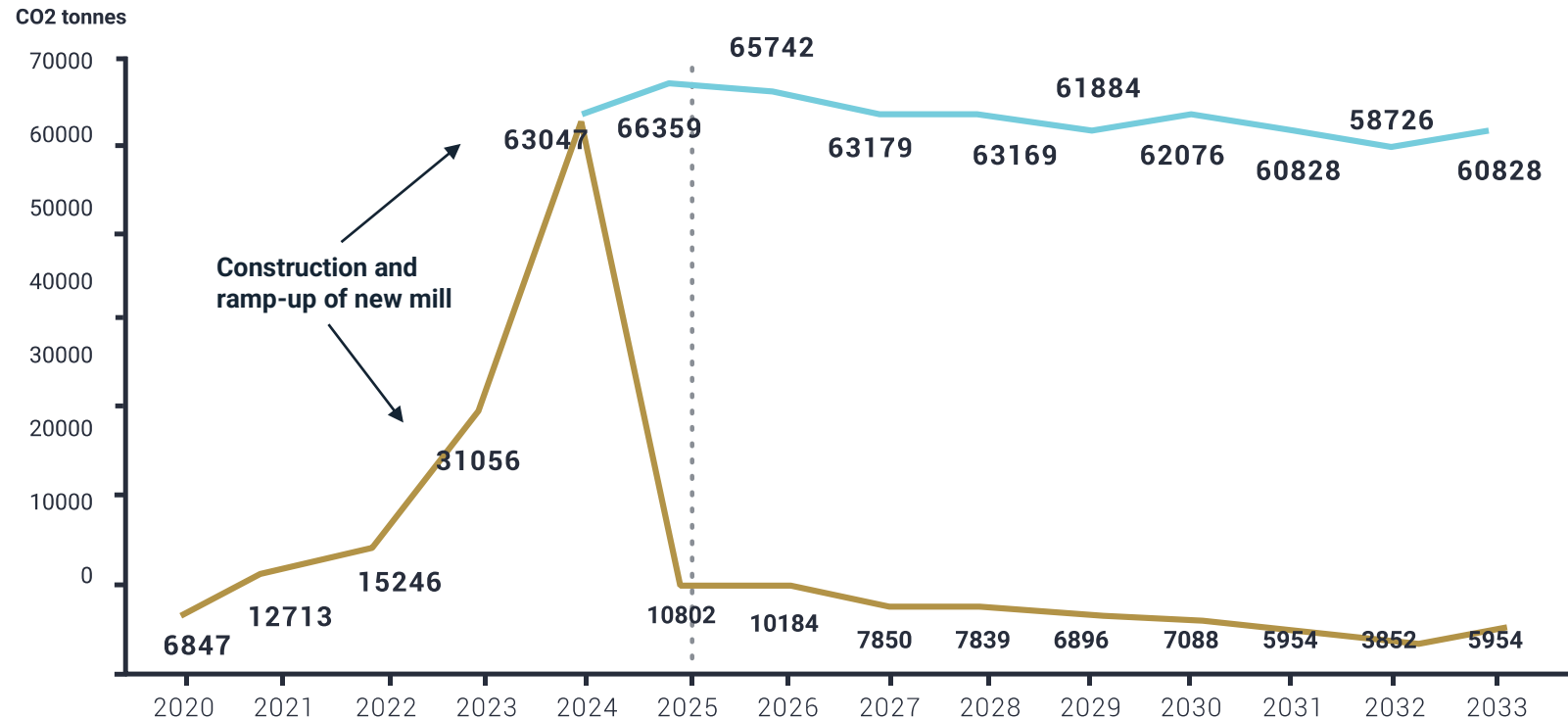


13,000
villagers impacted by medical clinic support

¹ 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 / Near-term Decarbonization Objectives

Estimated total GHG emissions for the Zgounder Silver Mine



88%
Reduction in
overall emissions
in 2025¹

¹ Compared to base year of 2021. Objective does not include Scope 3 emissions.

Aya / Near-term Decarbonization Objectives

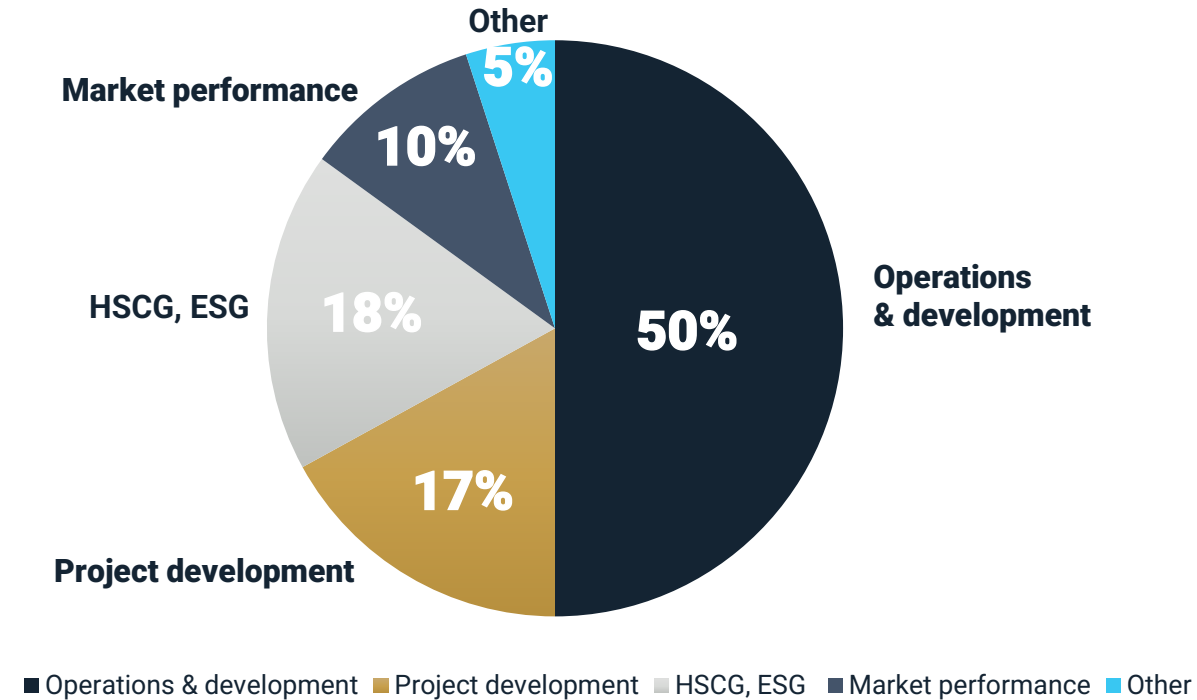
Achieved in the last three years since arrival of new management team

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:



3

EXPLORATION

1. Aya
2. Zgounder Silver Mine
3. Exploration
4. Catalysts



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)

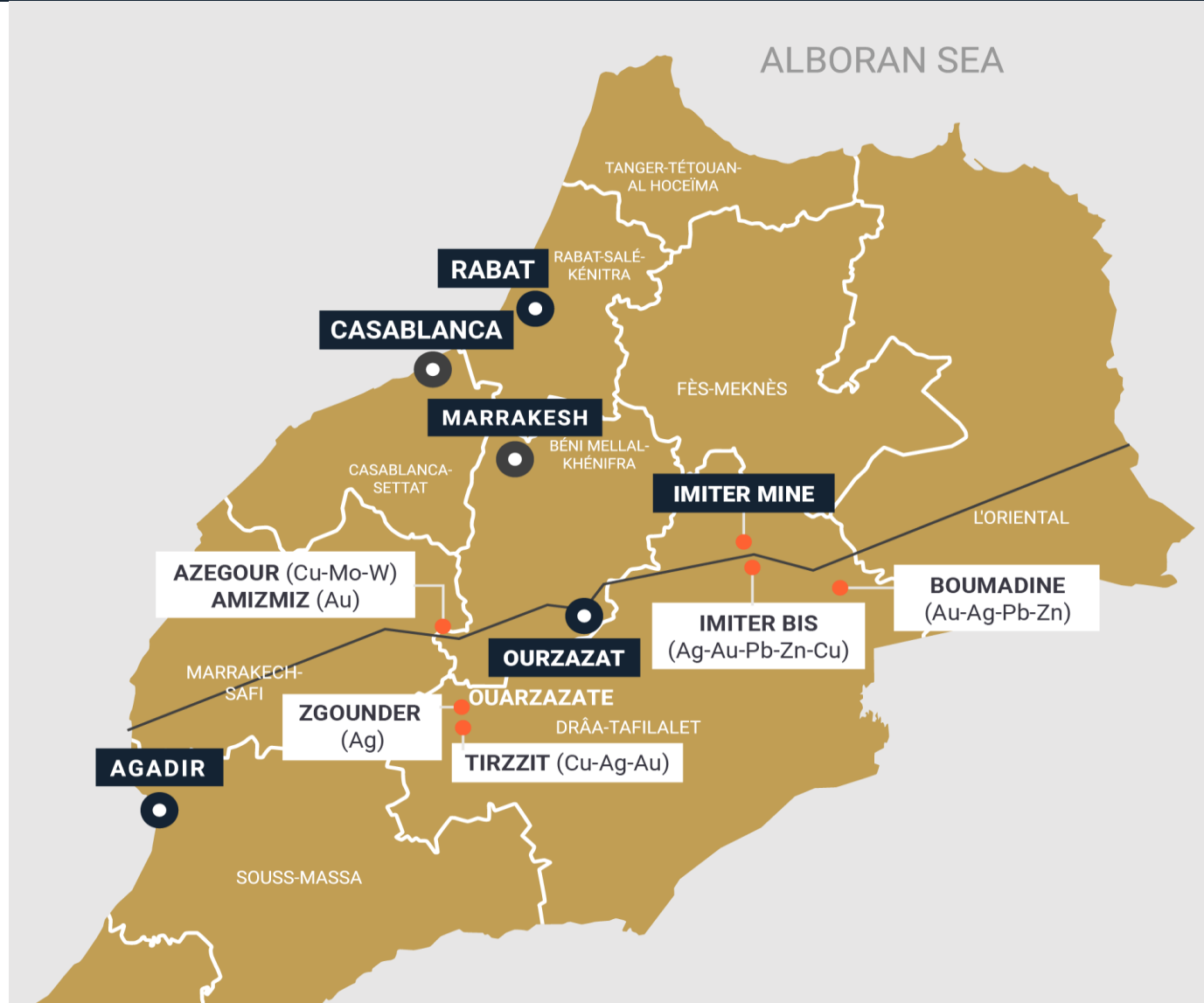
- **42,073m** completed of **120,000m** budgeted
 - 60,000m: explore and expand 5km strike
 - 60,000m: test new targets
- MobileMT regional survey complete

Zgounder Regional (Exploration)

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

Amizmiz (Exploration)

- Small drill and fieldwork program starting in Q3



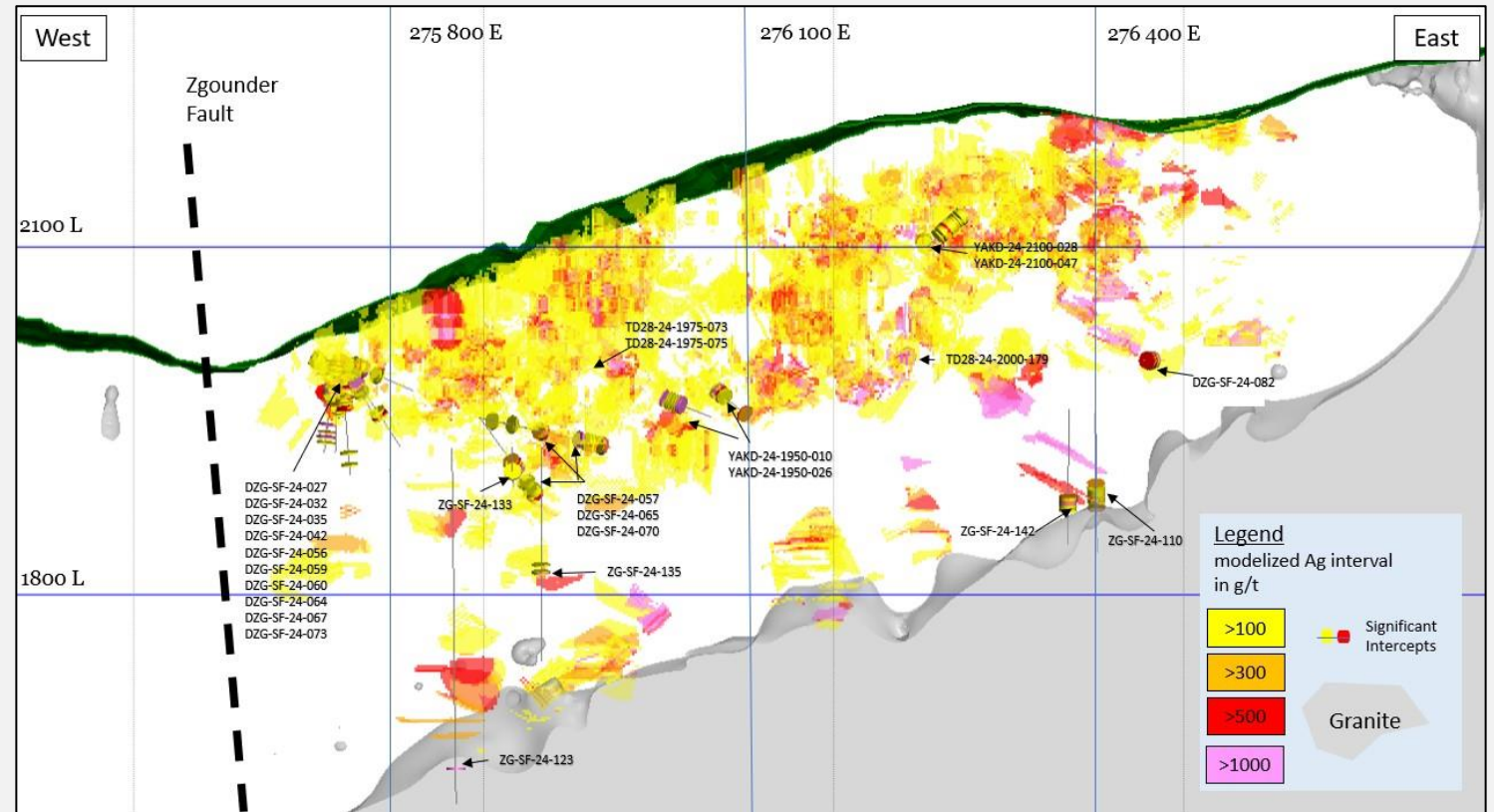
Zgounder / At-depth Drilling Prioritized on Near-Mine Permits in 2024

16,630m completed, and 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 Highlights¹

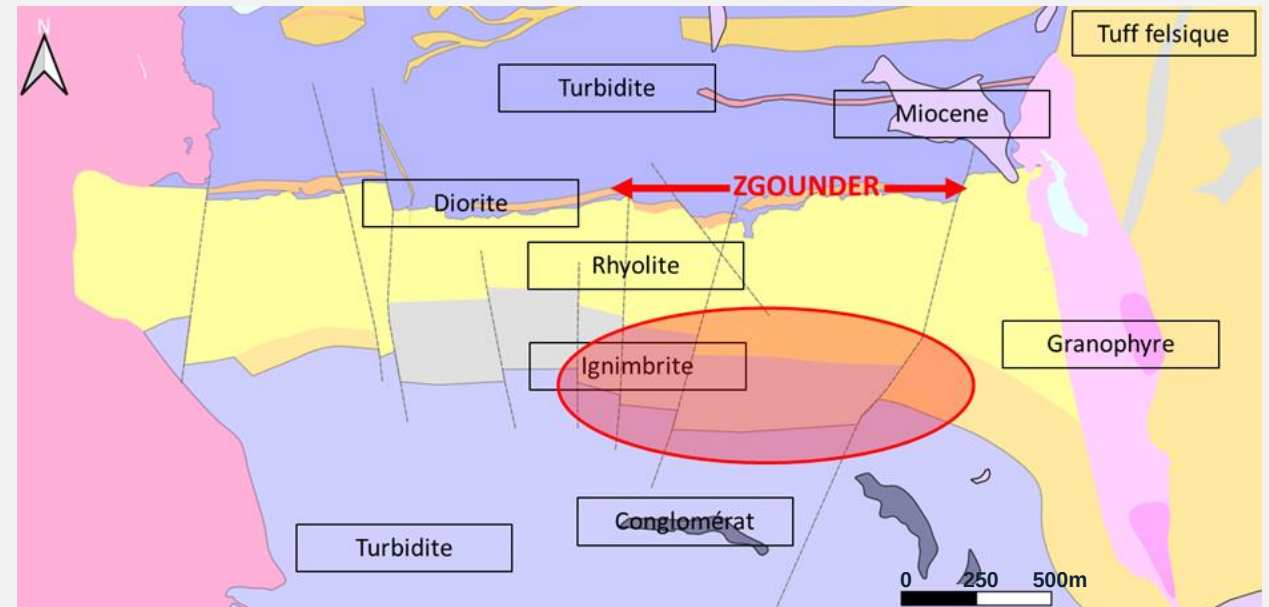
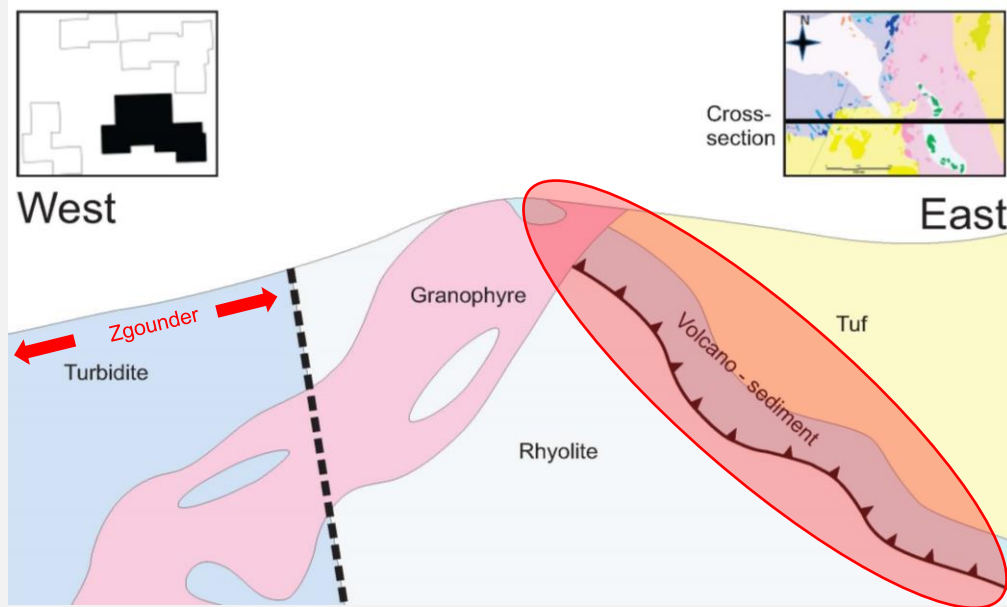
- **1,089 g/t Ag over 13.5m**, including 1,700 g/t Ag over 7.5m and 4,469 g/t Ag over 4.5m
- **322 g/t Ag over 17.6m**, including 1,877 g/t Ag over 1.5m
- **2,812 g/t Ag over 8.0m**
- **2,870 g/t Ag over 6.5**, including 7,229 g/t Ag over 2.0m
- **2,227 g/t Ag over 7.0m**, including 6,768 g/t Ag over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



¹ Refer to Aya Gold & Silver's February 28, September 6, October 12, 2023, March 5, March 28, May 2 and July 2, 2024 press releases

Zgounder Regional / Testing Possible East Extension & South Mirror in 2024

- **2,000m** drilling to test drill conceptual target under the Neocene cover (Tuffs) east of the granophyre
 - Potential continuation of the Zgounder deposit (volcano-sediments).
- **2,000m** to test drill southern contact of the rhyolite (never drill tested)
 - Sediments south of the rhyolite are slightly more conglomeratic than the “série-brune” (shale, siltstone and sandstone) of Zgounder; Imiter has found mineralization inside conglomeratic units



Tirzzit / Test Drilling Cu-Ag Mineralization in 2024 (Cu, Ag)

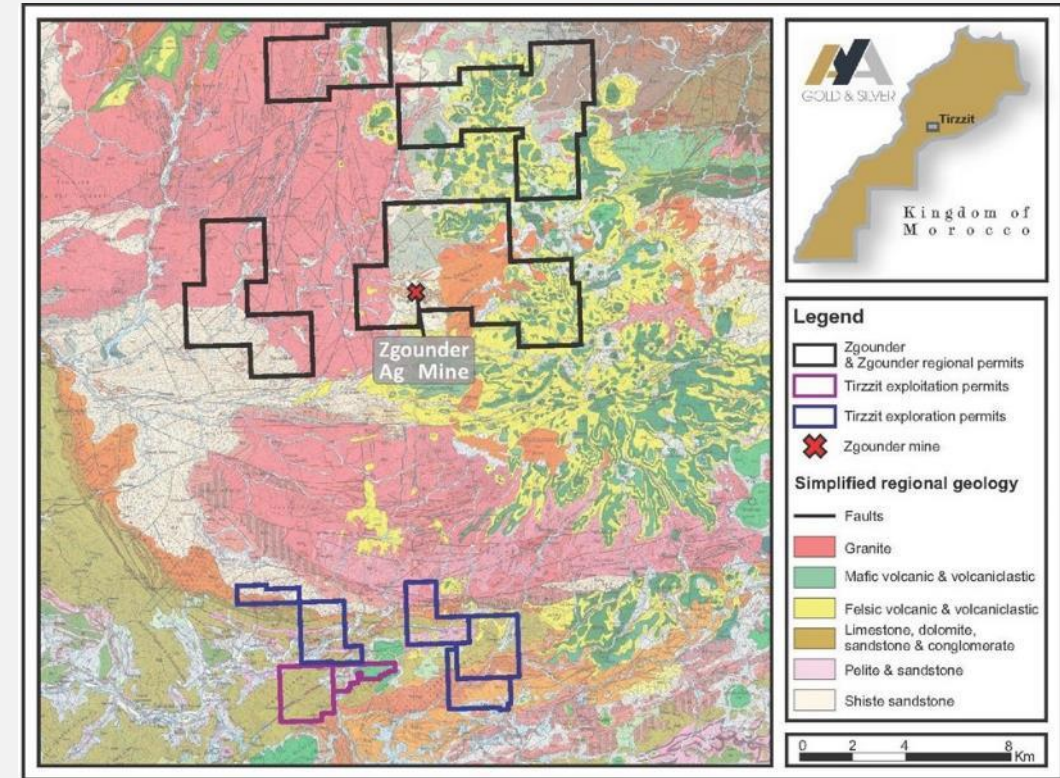
Historical copper mine offering near-surface silver and copper mineralization potential, with historical drilling intercepts of up to 3.5% Cu

- Airborne regional MobileMT survey completed in H1-2024
- 3,000m 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
- Collection of 7 permits (67.7km²) including the historical Tirzzit Copper Mine on Morocco's Anti-Atlas range, 25 km south of Zgounder

Potential

- Mineralization of historical deposit remains open in three directions
- No systematic exploration program using modern methods
- Easy road access and proximity to infrastructure

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

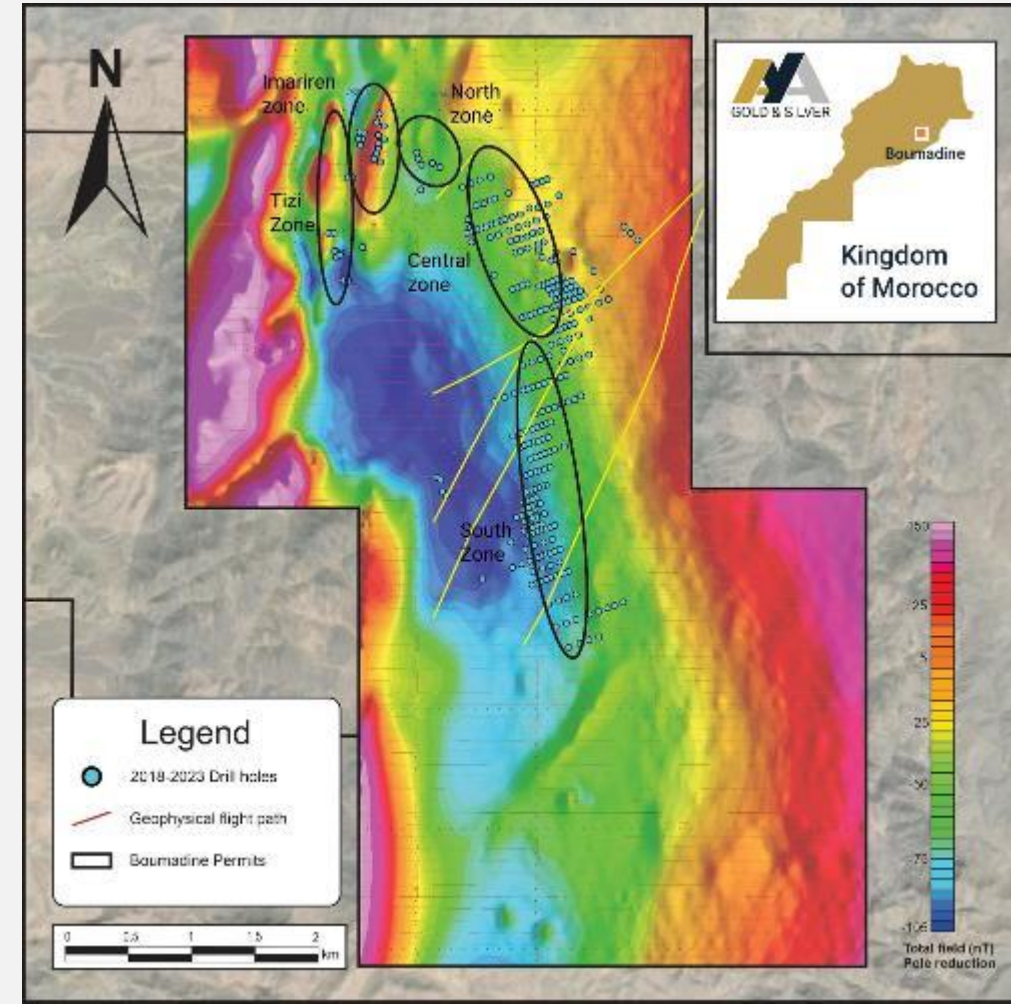


Boumadine / 2024 Resource Highlights (AgEq, AuEq, Cu, Pb, Zn)

Highlights¹

- **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 **7.4 Moz** of Ag, 165 koz of Au, 88 kt of Zn and 22 kt 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 **64.7 Moz** of Ag, 1.98 Moz of Au, 546 kt of Zn and 198 kt of Pb
- 41% of the inferred mineral resource is pit-constrained, and 59% is deemed 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

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



Boumadine / Robust Mineral Resource Estimate^{1 2 3} (AuEq, AgEq, Cu, Pb, Zn)

Potential to increase deposit in **all** directions

	Cutoff	Tonnes	Average Grade ²							Contained Metal ²						
			Ag	Au	Cu	Pb	Zn	AgEq	AuEq	Ag	Au	Cu	Pb	Zn	AgEq	AuEq
	NSR 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

¹As at April 15, 2024

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

³ 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 drilling¹

- 42,073m of **120,000m** budgeted drill program completed
 - **60,000m** – expand 5km 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^{1,2}

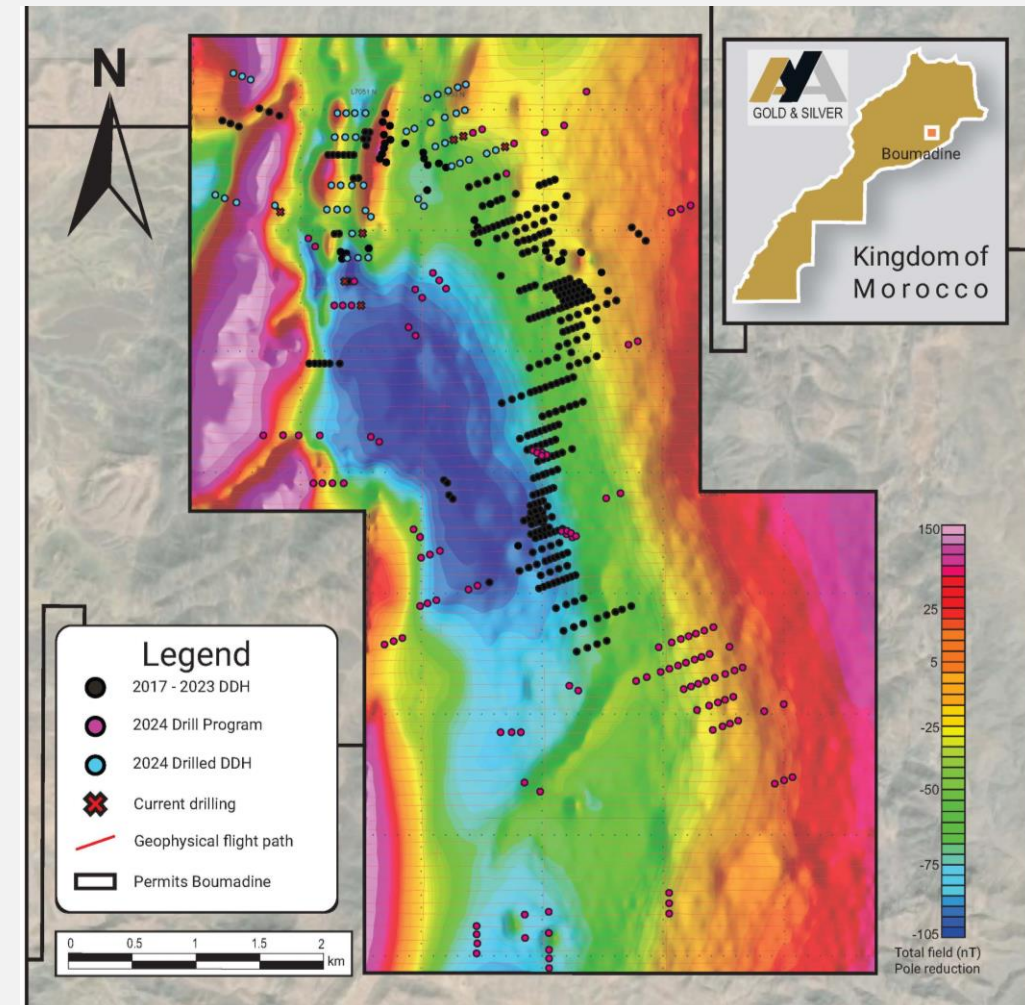
- Mapping and prospecting ongoing on 18 new permits
- Hyperspectral completed on most of the new permits
- Completion of 13,710-line km MobileMT geophysical airborne survey²:
- Identified **multiple potentially highly conductive anomalies to the west (5km) and south** of Main Trend
- Series of new N340 and north–south oriented potential conductive anomalies

Through consolidation

- Land position of **>198km²** – a 102% increase YTD

¹ 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 and May 31, 2024 press releases

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

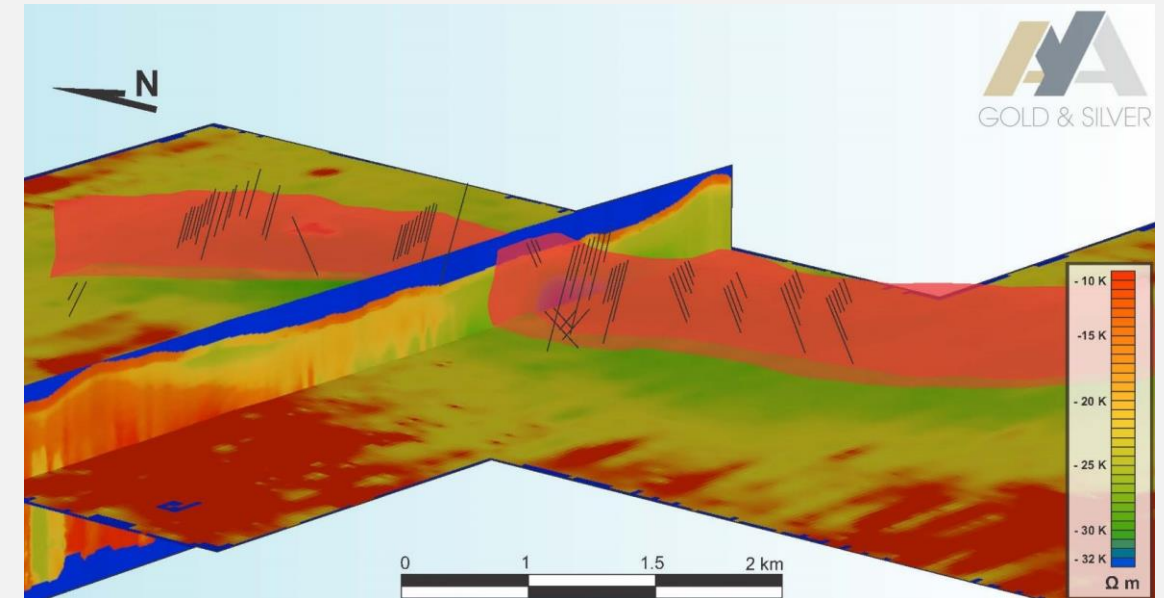
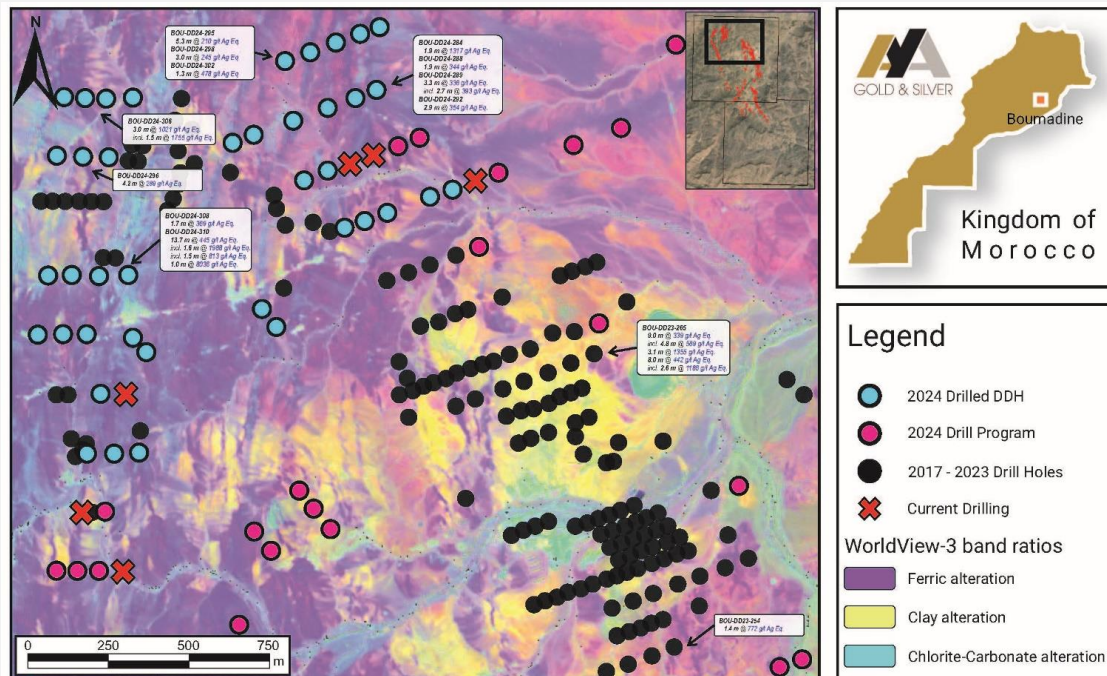


Boumadine / Expand 5km Strike, Which is Open in All Directions

Drilling Highlights¹

- **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)

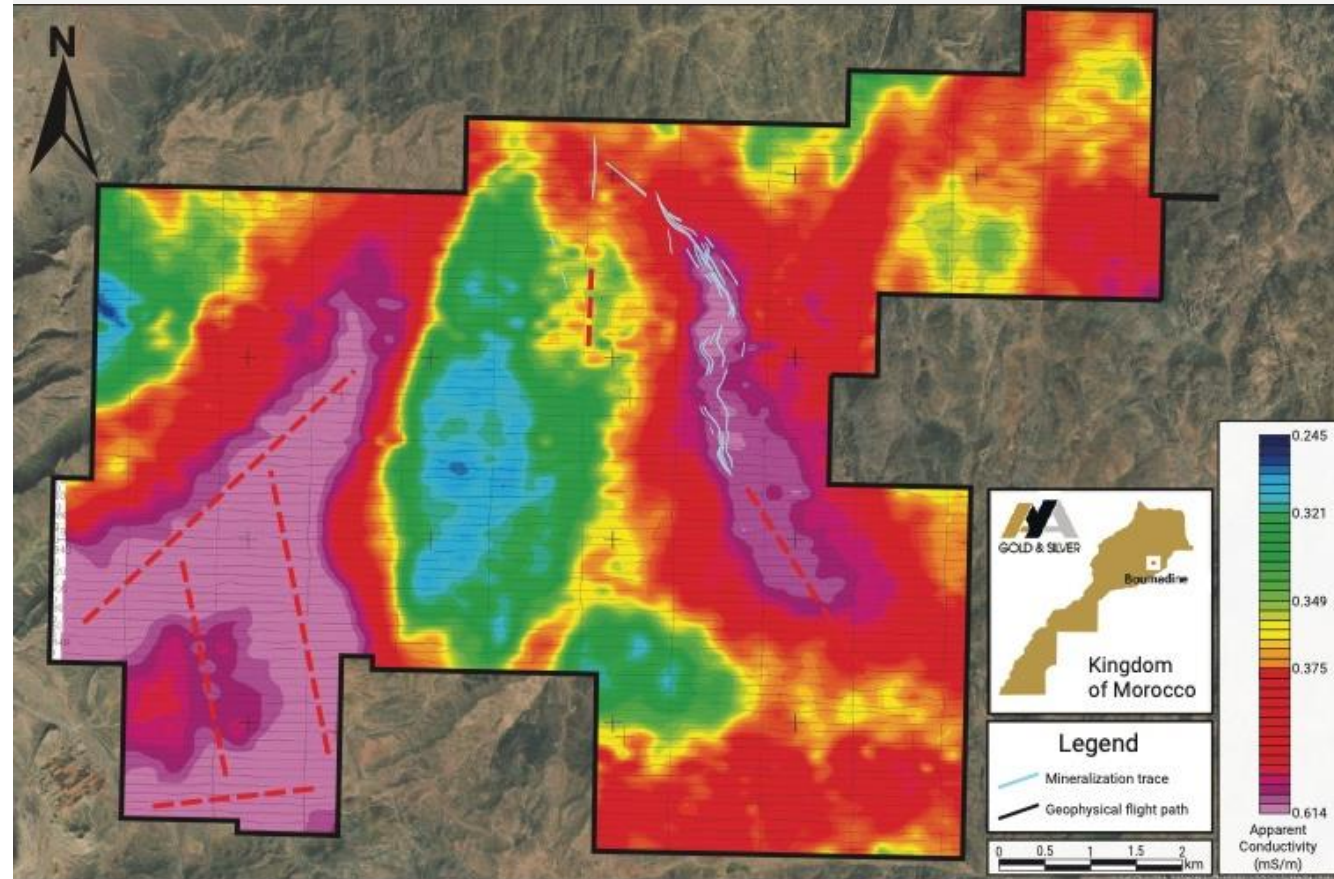
¹All intersections are in core lengths; Ag equivalent is based on a 100% recovery with the following ratios: 1g/t Au: 93.4 g/t Ag; 1% Cu: 130.4 g/t Ag; 1% Pb: 31.8 g/t Ag; 1% Zn: 54.1 g/t Ag.



Boumadine / Survey Outlines Multiple Potentially Highly Conductive Anomalies¹

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)

¹Refer to Aya's July 23, 2024 press release

Boumadine / Expanded Footprint, Multiple New Conductive Anomalies

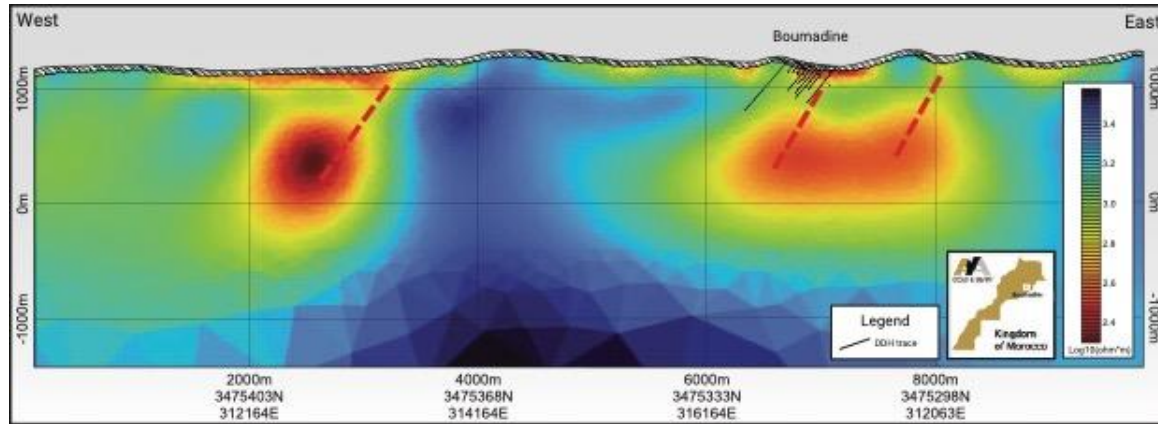


Figure – Preliminary Results – Section L2100 Passing through Boumadine – Apparent Conductivity with Drill Holes (target in dashed red)

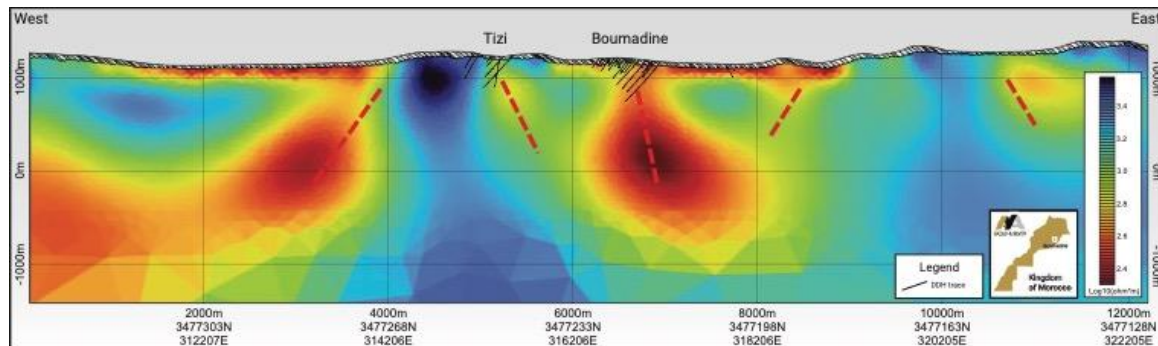


Figure – Preliminary Results – Section L2290 Passing through Boumadine and Tizi – Apparent Conductivity with Drill Holes (target in dashed red)

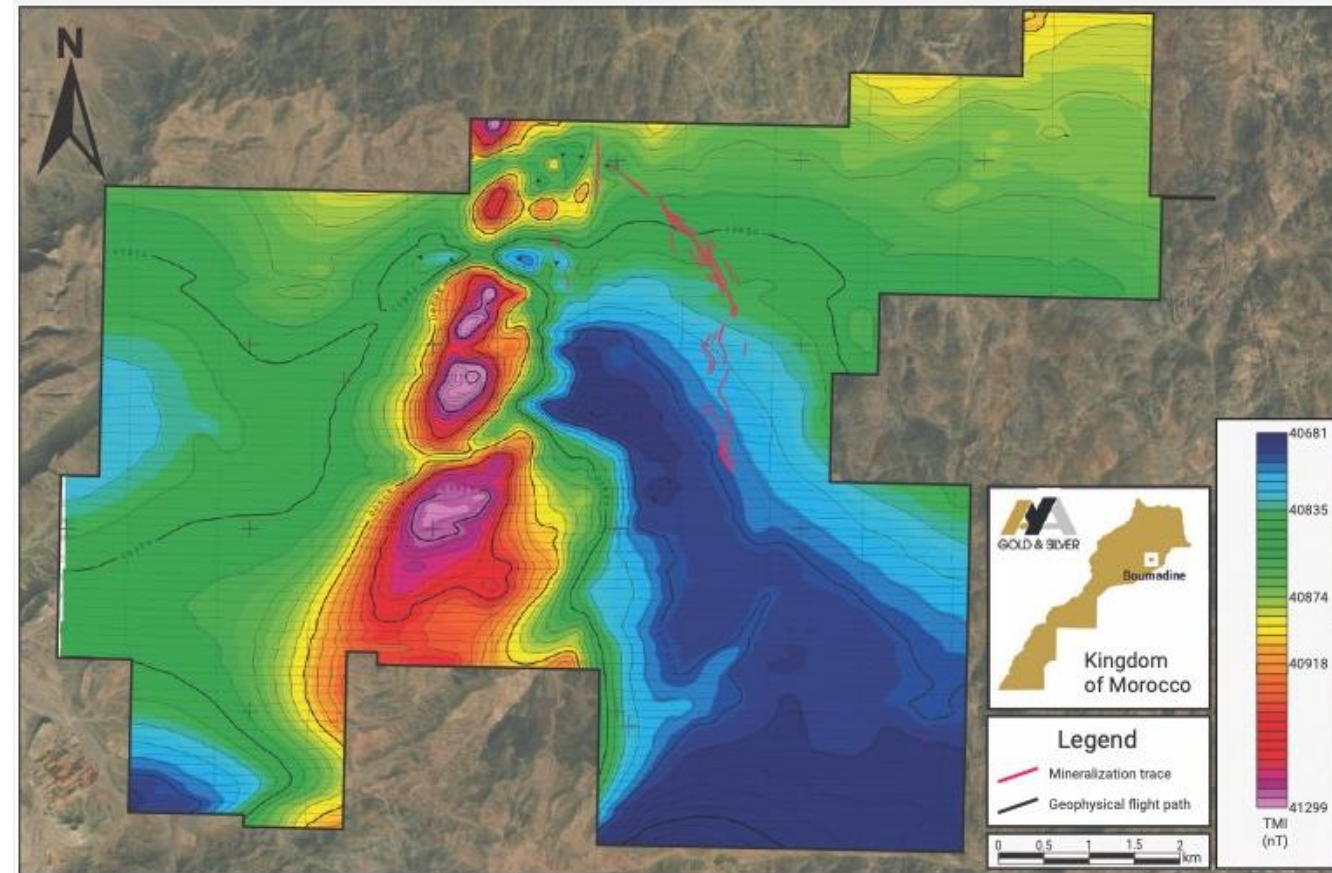


Figure – Preliminary Results – Total Magnetic Intensity

Amizmiz / Expand and Test Historical Work (Au)

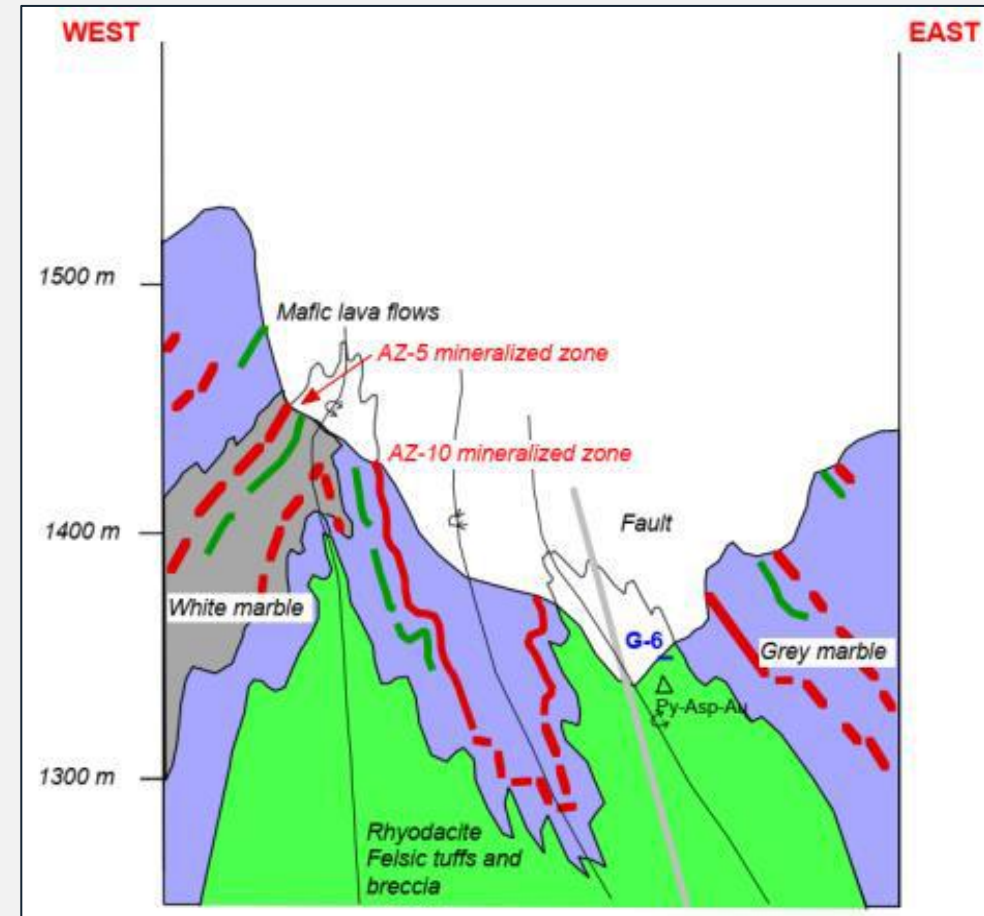
Expand understanding of Amizmiz mineralization:

- Mining permit located 55km SSW of Marrakech and 12km from historical Azegour Mine.
- Follow up on detailed geological and structural mapping that identified mineralized zones consisting of **oxidized, high-grade gold-bearing veins**
- Fieldwork (detail mapping and grab sampling) to begin **mid-2024**, followed by **2,800m** of core drilling

Historical work (1999-2011):

- Mapping, trenching and channel sampling identified **57** mineralized sites with Au values up to **127.2 g/t**
- Magnetic and IP/resistivity surveys conducted in 2009
- **6,000m** of core drilling conducted on targets identified from IP and magnetic geophysical surveys

Schematic cross section of Amizmiz



Aya / Catalysts

- 120,000 drill program at Boumadine
- 40,000m drill program on Zgounder & Zgounder Regional
- Zgounder Silver Mine expansion
- 2024 **silver production and cost guidance**
- 2024-2025 **ESG** milestones of **EBRD-CTF loan agreement**





1320 GRAHAM, SUITE 132
VILLE MONT-ROYAL, QC H3P 3C8

BENOIT LA SALLE: Benoit.Lasalle@ayagoldsilver.com

ALEX BALL: Alex.Ball@ayagoldsilver.com

www.ayagoldsilver.com | info@ayagoldsilver.com

TSX: AYA | OTCQX: AYASF

