

Unlocking silver growth in Morocco



INVESTOR PRESENTATION

MAY 2025



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 Vice President 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 2024 Q3 MD&A, and other filings made with Canadian securities regulatory authorities and available at www.sedar.com. 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.

AYA

Aya Overview

Zgounder Silver Mine

Exploration



Aya / Proven Management Team



Benoit La Salle, FCPA, MBA
President & CEO

Benoit is a mining veteran with 30 years of experience as CEO of Africa-focused mining companies. Benoit founded, developed and grew 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 over 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 18 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 24 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 15 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.

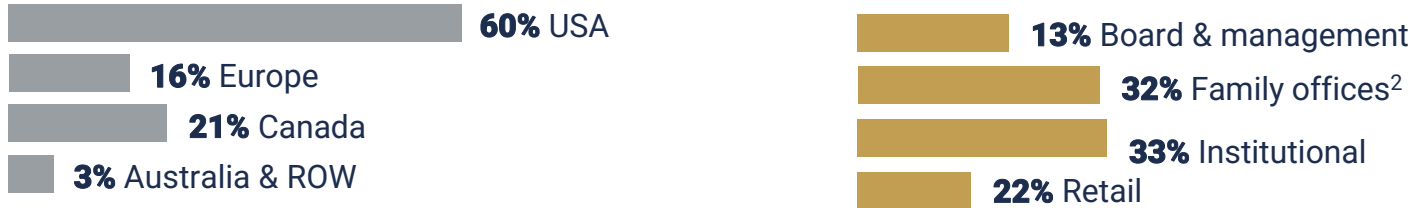


John Burzynski
Director

Mr. Burzynski brings over 30 years of mining industry experience and was a founding member of Osisko Mining Corporation, where he served as President and CEO. He was instrumental in the development, construction, and successful operation of the Canadian Malartic Mine, one of Canada's largest gold operations. Most recently, he led Osisko through the Windfall Gold Project's development, ultimately resulting in the C\$1.2 billion acquisition of the company by Gold Fields in early 2024.

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		130.8M
Shares – F.D. ¹		142.3M
Share Price (May 23, 2025)	C\$	\$11.69
Market Cap (May 23, 2025)	C\$	\$1.5B
Cash (March 31, 2025) ²	US\$	\$18M
Debt ³	US\$	\$100M
EBRD Credit Facility ⁴	US\$	25M
30-day average volume	'000	870

1. Includes 9.6M in options and 2.0M in RSU/DSU.

2. Non-GAAP Measures, consisting of cash and cash equivalents \$18.3M and restricted cash of \$18.2M.

3. Full drawdown on project financing from the EBRD.

4. Undrawn credit facility. Announced May 12, 2025.

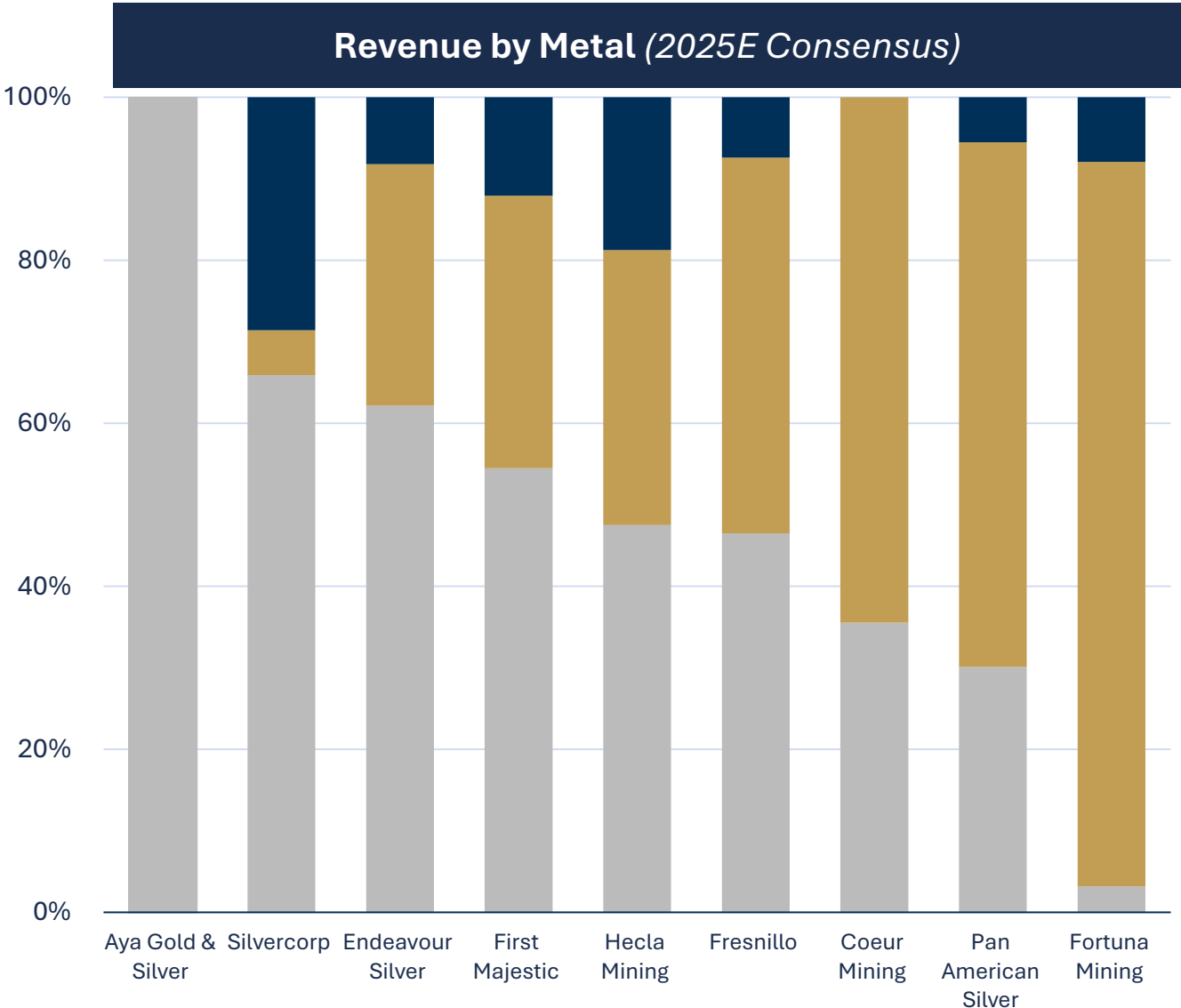
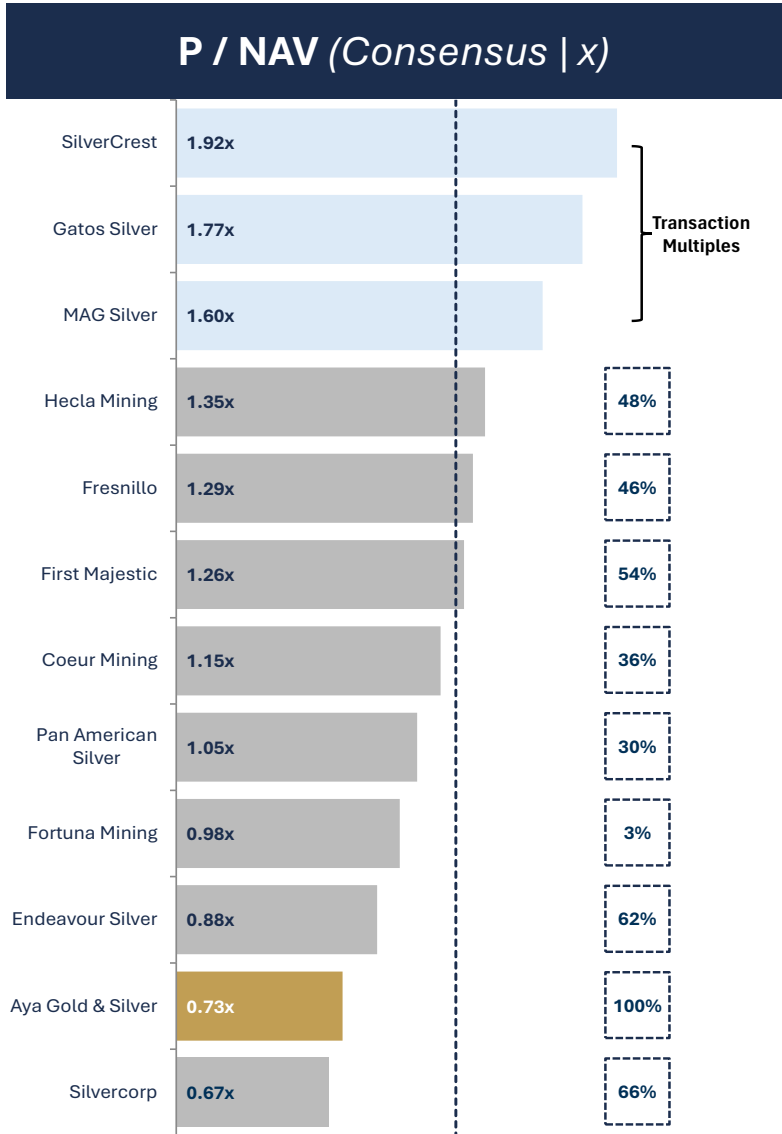
BEST 50
OTCQX
2024

TSX 30
2023





Value Opportunity with the Only TSX-Listed Pure-Play Silver Producer



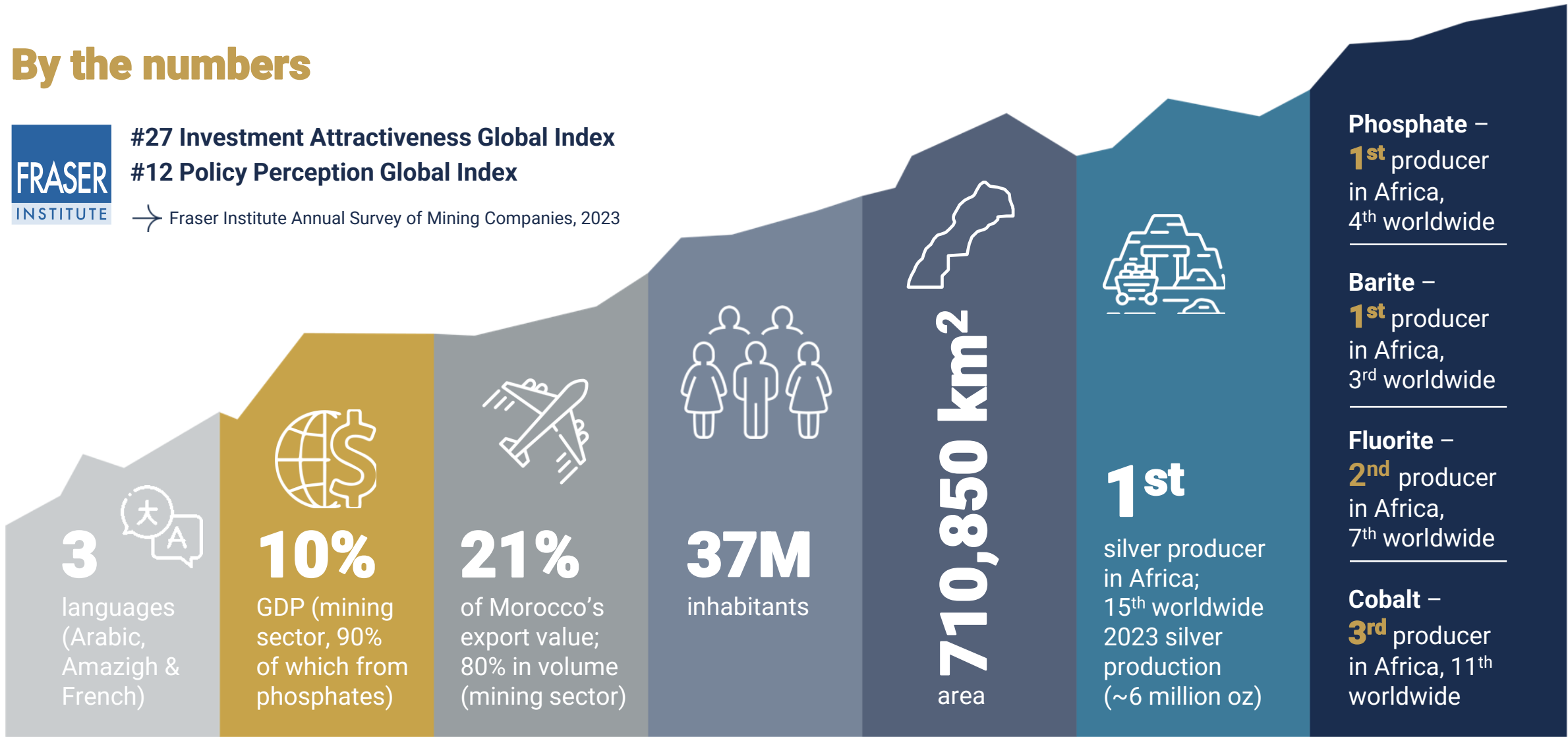
By the numbers



#27 Investment Attractiveness Global Index

#12 Policy Perception Global Index

→ Fraser Institute Annual Survey of Mining Companies, 2023



Morocco / Developing the Mining Sector



Our Assets / Morocco-Focused, Quality Growth Portfolio



Zgounder Silver Mine – Cornerstone of Aya’s Growth

- 2024 full year production of **1,646,265 oz of silver**¹
- **96M** oz M&I resources at 306 g/t Ag²

Aya Development Upside

- Boumadine – gold, silver, lead, zinc
 - **74M** oz AgEq indicated resources at **448 g/t AgEq**³
 - **377M** oz AgEq inferred resources at **402 g/t AgEq**³

Aya Exploration Upside

- Zgounder Regional & Tirzzit
- Imiter bis
- Azegour

Maximizing Gold Exploration Potential w/ Mx2⁴

- Amizmiz



1. See news release dated February 11, 2025.
2. 'NI 43-101 Technical Report and Updated Mineral Resource Estimate of the Zgounder Silver Project, Kingdom of Morocco (Dec 13, 2021).
3. See news release dated February 24, 2025 announcing Boumadine's updated mineral resource estimate.
4. * Refer to Aya Gold & Silver's September 12, 2024 press release.

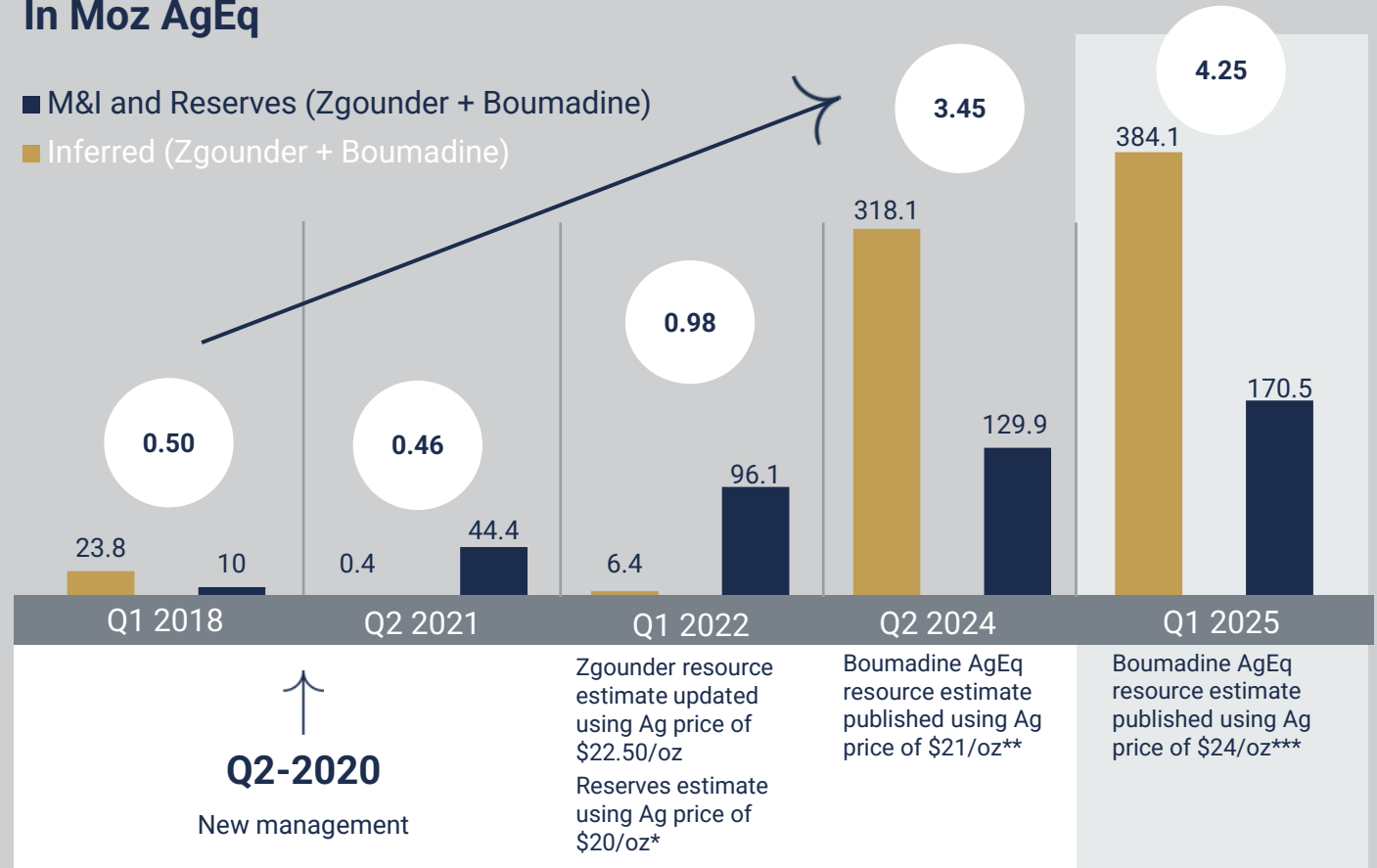
Industry-Low Discovery Costs

- Ag resource as a unit of total shares outstanding up **>8x** to **554Moz AgEq** since Q2-2020
- Industry-low discovery cost of **\$0.10** and industry-high AgEq per share growth



In Moz AgEq

- M&I and Reserves (Zgounder + Boumadine)
- Inferred (Zgounder + Boumadine)



*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.

***See news release dated February 24, 2025 announcing updated NI 43-101 MRE 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.

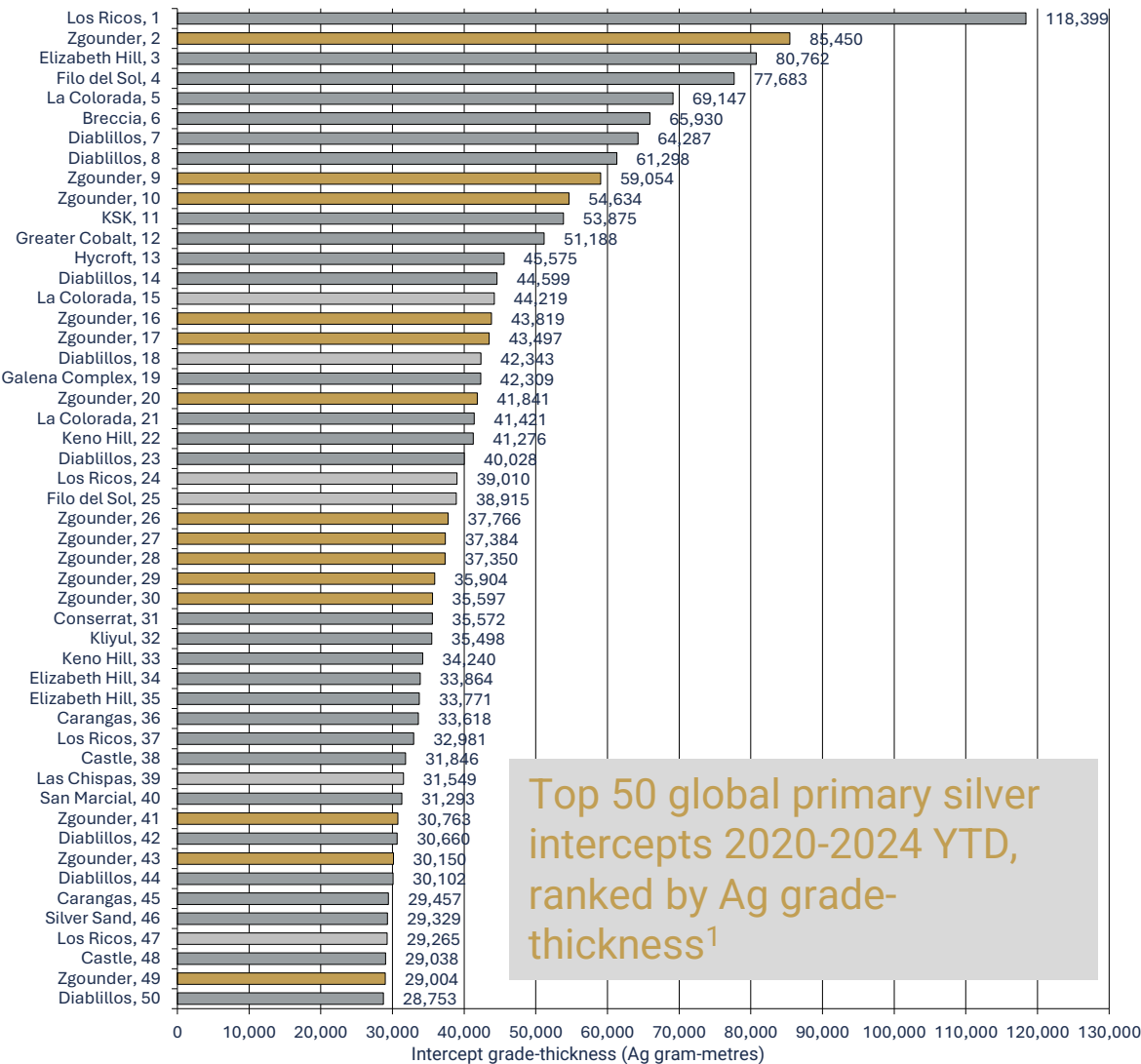
Note 76.9M, 96.7M, 104.9M, and 130M total shares outstanding in Q1-2018, Q2-2021, Q1-2022, and Q2-2024, respectively Only Zgounder resources and reserves are accounted for between Q1-2018 and Q2-2022. Q2 2024 includes resources from Zgounder and Boumadine and reserves from Zgounder.

Zgounder / Top Silver Intercepts Globally



Zgounder reported 3 out of the top 10 and 15 out of the top 50 global silver intersections of 2020-2024 YTD¹

- 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



Top 50 global primary silver intercepts 2020-2024 YTD, ranked by Ag grade-thickness¹

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

Zgounder / Strong Operational Execution and Efficiencies

Solid operational standard reached in 2021 by:

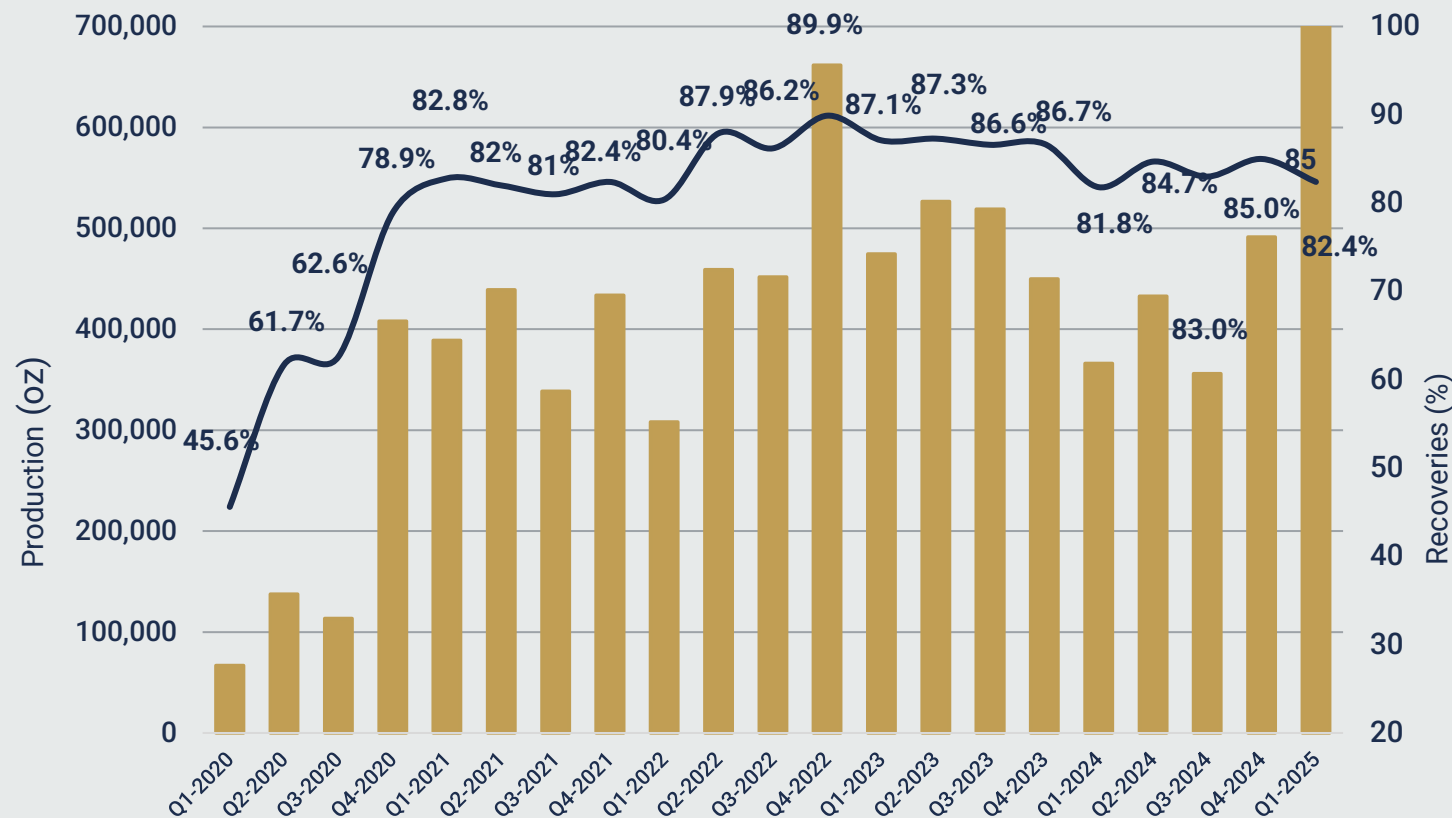
- Switch to cut-and-fill mining method
- Implementation of operating best practices
- Capital infrastructure & equipment upgrades
- Recruitment of key personnel

Pre-expansion mechanization began in 2022:

- Commissioning of new equipment, such as jumbos, dumpers, scoops, crane & scissor lift platforms
- Reconciliation of monthly block models with back feed

Pre-expansion improvements:

- Addition of cone crusher increased throughput; 700tpd+ nameplate capacity
- Refurbishment of electrical components



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 the 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 (K)	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 NAV5%
(\$22/oz)



\$139.4M
Growth capex



\$9.58
AISC (LOM)



11-year
LOM



48%
Post-tax IRR
(\$22/oz)

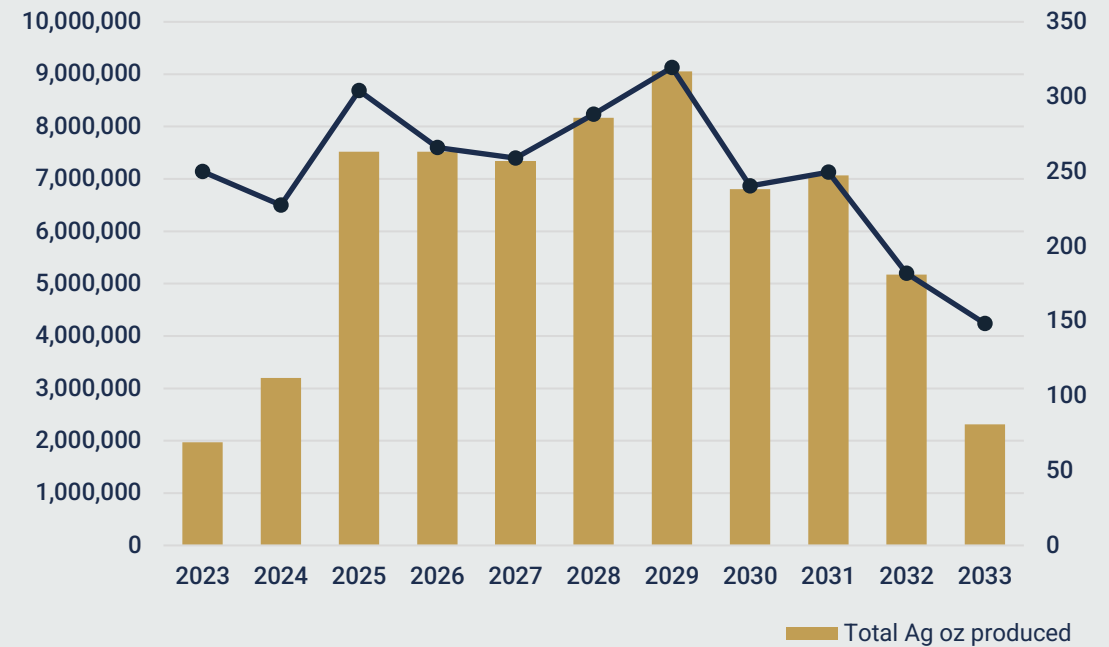


1.7-year
Payback
(post-expansion)



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.

Q1-2025 Highlights

Zgounder Mine expansion ramp up contributes to steady improvements:

- Significant increase in silver production, ore processed and mine production
- Open-pit ore mined equaled approximately 68% of total ore mined during the quarter reaching targeted open-pit / underground mining production split
- **Stockpiled 281,290t of ore** at quarter-end
- Throughput and mill availability good; recovery still targeting feasibility recovery rate of 89%

Exploration and development activities:

- Completed **2,916m of drilling** at Zgounder and **1,059m of drilling** at Zgounder Regional
- Completed **46,207m of drilling** at Boumadine
- Published updated Mineral Resources Estimate for Boumadine

ESG priorities advance:

- Strengthened health and safety ("H&S") processes through preventative measures, with 100% of incidents analyzed and 2,364 hours of training completed
- Expanded tutoring programs at schools in Talouine and Taouyalte
- Began new community engagement inviting project proposals from local communities, entrepreneurs and cooperatives

¹ Non-GAAP Measures, consisting of cash and cash equivalents of \$18.3 million, and restricted cash of \$18.2 million (March 31, 2025).

² Announced post Q1 2025, please refer to news releases dated April 16, 2025 and May 12, 2025.

1,069Koz

Silver oz produced in Q1-2025



\$37M¹

In cash and restricted cash at quarter end; excl. \$11.6M in accounts receivable



Completed²

Strategic transfer of Amizmiz gold project to Mx2 Mining



\$25M²

Credit facility from EBRD

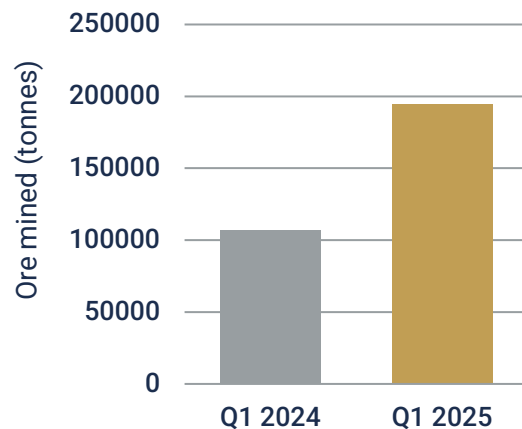


Zgounder Expanded Operations

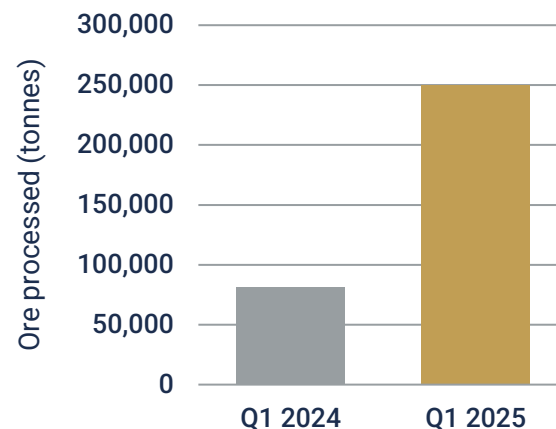


Q1-2025 / Operational Highlights

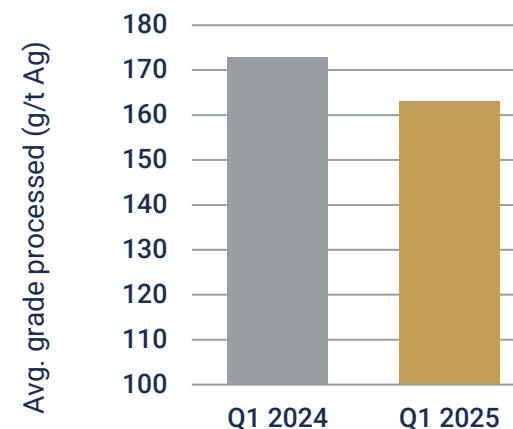
Ore mined of 194,661 tonnes



Ore processed totaled 249,743 tonnes



Avg. grade processed of 163 g/t Ag

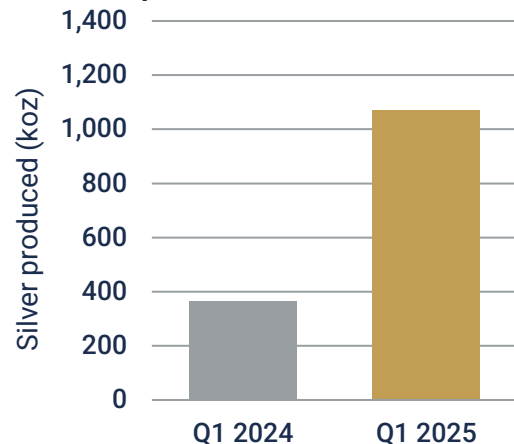


Silver production increased 192% YoY due to expanded mining and milling

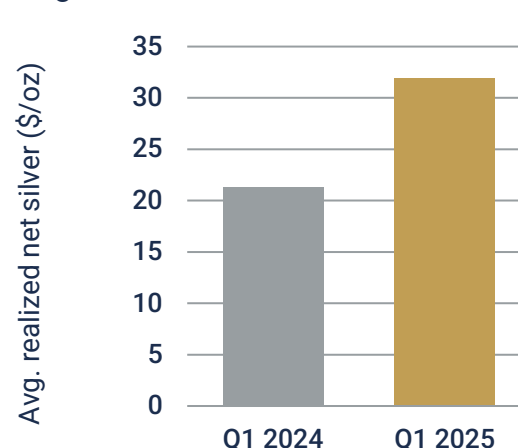
Ore processed increased 207% YoY as Zgounder's new plant ramped up processing

Average grades decreased; operational team continues to optimize expanded operations

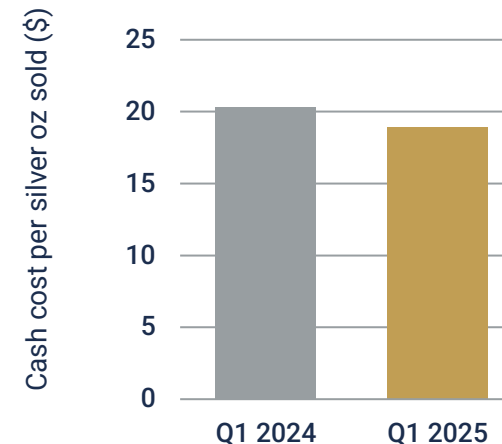
Silver production of 1,069K oz



Avg. Net Realized Silver of \$31.87/oz



Cash cost per Ag oz sold of \$18.93



April 2025 Production Highlights

- Mine ramp-up continues to exceed expectations, with 2,750 tonnes per day (“tpd”) mined in April 2025.
- Mill throughput and availability in April are above expectations, averaging 3,025 tpd at 98% availability. Silver recovery of 80% in April.
- Recovery rates have improved in May.
- Clear path to 89% recoveries identified with focus on stabilizing and optimizing oxygen production.
- Specialized contractor mobilized onsite to restore full capacity of the oxygen plant, with improvements expected over the coming weeks.
- Direct collaboration was initiated with the oxygen plant equipment supplier, to fast-track long-term performance enhancements.

April Production Metrics

	Q1-2024	Q1-2025	April 2025
Silver production (oz) ¹	366,362	1,068,652	345,550
Tonnage processed (t)	81,331	249,743	90,763
Silver recovery (%)	82	82	80
Mill availability (%)	96	91	98
Mine production (t)	106,880	194,661	82,496

Q1-2025 Financial Highlights / Strong Financial Position and Liquidity



<i>All amounts in 000s of USD</i>	Q1-2025	Q1-2024	Variance
Revenue	33,831	5,077	566%
Cost of sales	25,584	4,741	397%
Gross profit	10,247	336	2,950%
Operating income (loss)	3,328	(2,869)	216%
Net income (loss)	6,930	(2,592)	367%
Operating cash flows	7,893	(3,736)	311%
Shareholders			
Earnings (loss) per share – basic	0.05	(0.02)	NM
Earnings (loss) per share – diluted	0.05	(0.02)	NM

	Q1-2025	Q4-2024	Variance
Working capital ¹	1,752	23,424	(93%)
Cash and restricted cash ²	36,576	49,190	(26%)
Accounts receivable	11,645	1,827	537%

> EBRD credit facility of \$25M³

1. Non-GAAP Measures, consisting of current assets of \$73,268 less current liabilities of \$71,516 (December 31, 2024, current assets of \$76,540 less current liabilities of \$53,116).

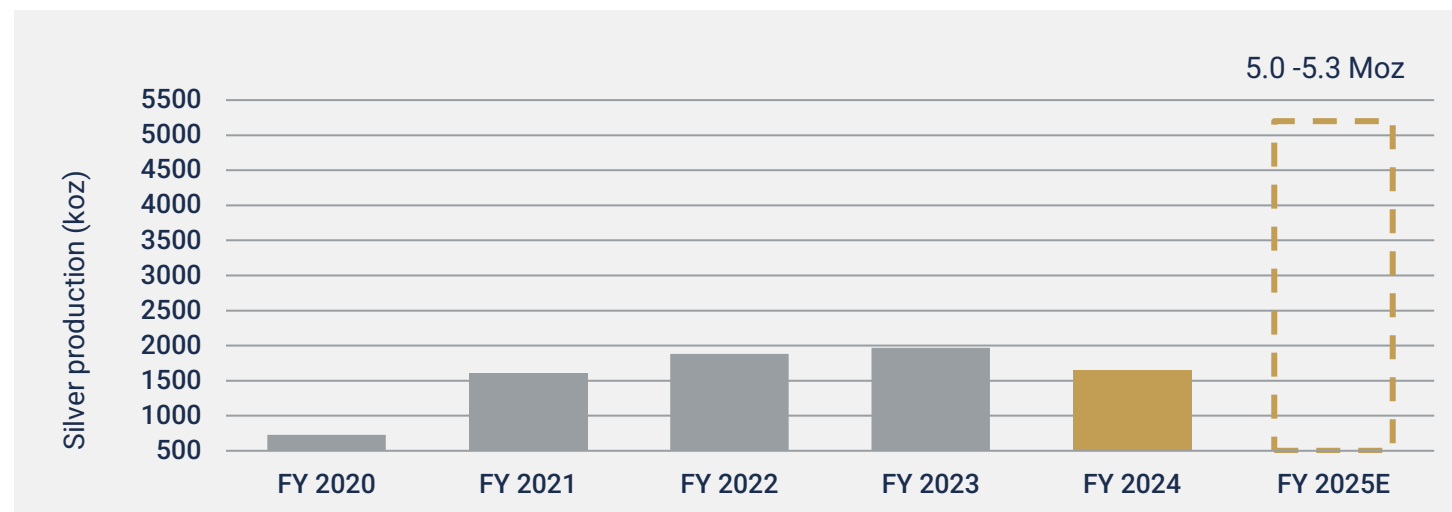
2. Non-GAAP Measures, consisting of cash of \$18,319 and restricted cash of \$18,257 (December 31, 2024, balances of \$30.944 million and \$18,246, respectively).

3. Announced post Q1-2025, please see news release dated May 12, 2025.

Zgounder Mine / 2025 Production and Cost Guidance

	2025 Guidance
Silver production (Moz Ag)	5.0 – 5.3
Silver cash cost (\$/oz)	15.00 – 17.50
Recovery (%)	84 – 88
Average grade processed (g/t Ag)	170 – 200
Exploration and development for all Moroccan projects (\$ million)	25 – 30

- Foreign currency assumptions used: US\$/C\$1.40; and US\$/MAD 10.10.
- The Corporation's primary focus for 2025 is ramping up the plant and mining to steady state of 3,000tpd while rationalizing costs.



2025 Exploration Program

Zgounder Silver Mine

- **2,916m** drilled on near-mine targets
- Drilling confirmed mineralization at depth at the granite contact outside of the current resource boundary.

Boumadine

- **39,600m** of DDH and **6,607m** of RC holes completed
- Drilling confirmed continuity of Boumadine deposit and extended the strike length of the Tizi Zone from 2.0 km to 2.2 km.
- New targets identified in 2024 were drill tested. These results are pending.

Zgounder Regional

- **1,059m** of DDH completed
- Detailed mapping and prospecting are being carried out on both Tourckal and Zgounder Far East permits.

Amizmiz (Spin Out)

- Completed strategic transfer of full ownership of the Amizmiz gold project to Mx2 Mining Inc. post quarter end*

* Refer to Aya's April 16, 2025 news release.



2025 Exploration Program

➤ **\$25-30 million**
exploration and
development budget

➤ **100,000m -
140,000m**
Boumadine exploration

➤ **20,000m –
25,000m**
Zgounder exploration

- **Zgounder:**

- Follow up on underground targets (near-mine) generated from the 2024 program.
- Drill targets within the Zgounder Regional permits with the objective of finding satellite mineralization to Zgounder.

- **Boumadine:**

- 50% of the drilling to focus along the Main Trend and Tizi to continue extending the known mineralization trend along strike and at depth and to infill known areas.
- 50% drilling will be greenfield exploration designed to test geological hypotheses and drill targets generated from the past three years of work.

Drilled 7,122m year-to-date¹

Drilling confirmed mineralization **at depth at the granite contact** outside of the current resource boundary.

Recent Drilling Highlights¹

2,425 g/t Ag over 17m,
including 6,311 g/t Ag over 5.0m

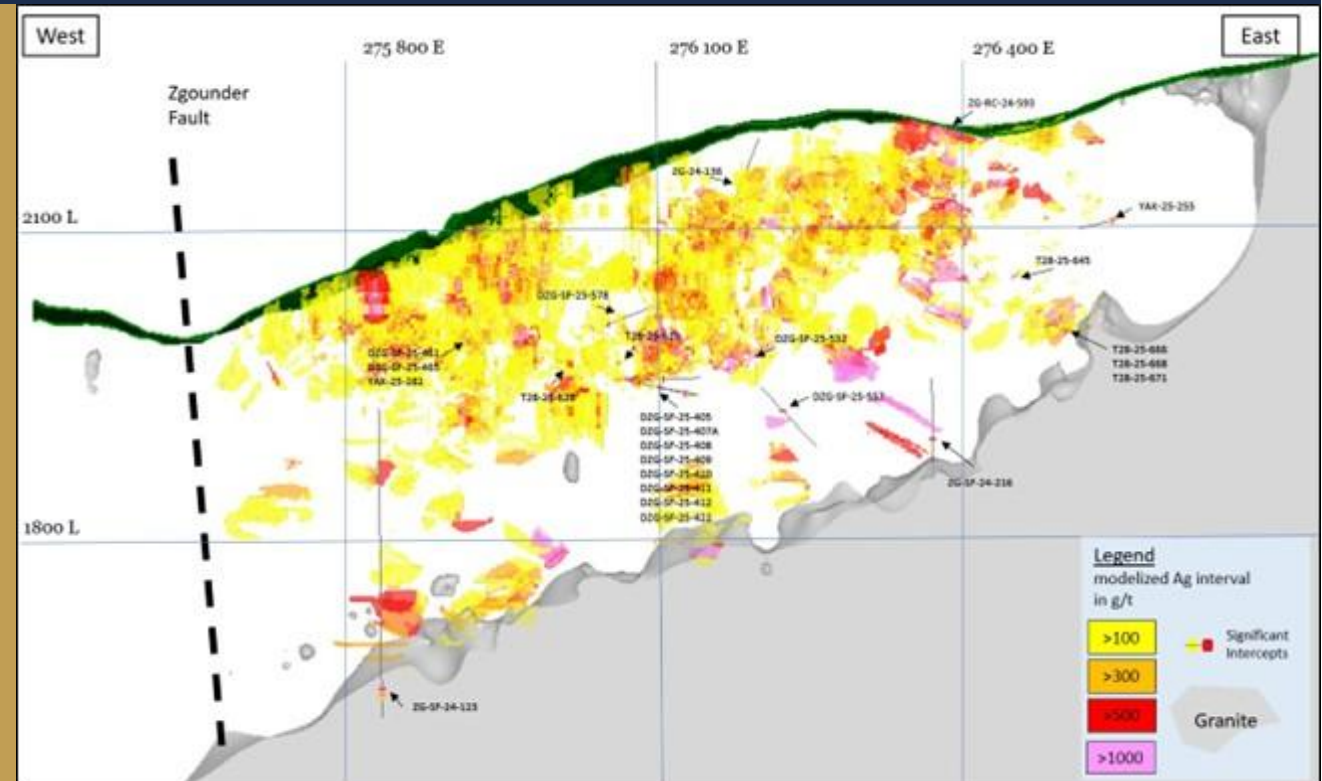
1,356 g/t Ag over 20.0m,
including 1,799 g/t Ag over 14.0m

5,696 g/t Ag over 2.5m

3,279 g/t Ag over 8.0m,
including 6,425 g/t Ag over 4.0m

1,640 g/t Ag over 12.6m,
including 10,104 g/t Ag over 1.0m and
2,747 g/t Ag over 7.0m

¹ Refer to Aya's May 21, 2025 January 7, 2025, and July 2, 2024 news releases.



Zgounder Regional & Tirzzit

Zgounder Regional¹

- Drill testing surrounding permits – some near Zgounder mine regional targets
- Grab sample results have identified some high-grade grab Ag-Cu, and Au, along with many precious metal anomalies, indicating a strong mineralization potential within 20km from the Zgounder deposit
- Ag-Cu anomalies in the northern and eastern regions are associated with intermediate to mafic units, while Au anomalies in the southwest correlate with strongly altered rocks
- New targets in the Zgounder Far East permits will be drill tested in the coming months (H2 2025).

Tirzzit²

- Historical artisanal copper mine offering near-surface silver and copper mineralization potential
- Mineralization of historical deposit remains open in all 3 directions
- Collection of 5 exploration permits and two mining licenses (67.7km²) 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

1 Refer to Aya Gold & Silver's May 21, 2025.

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

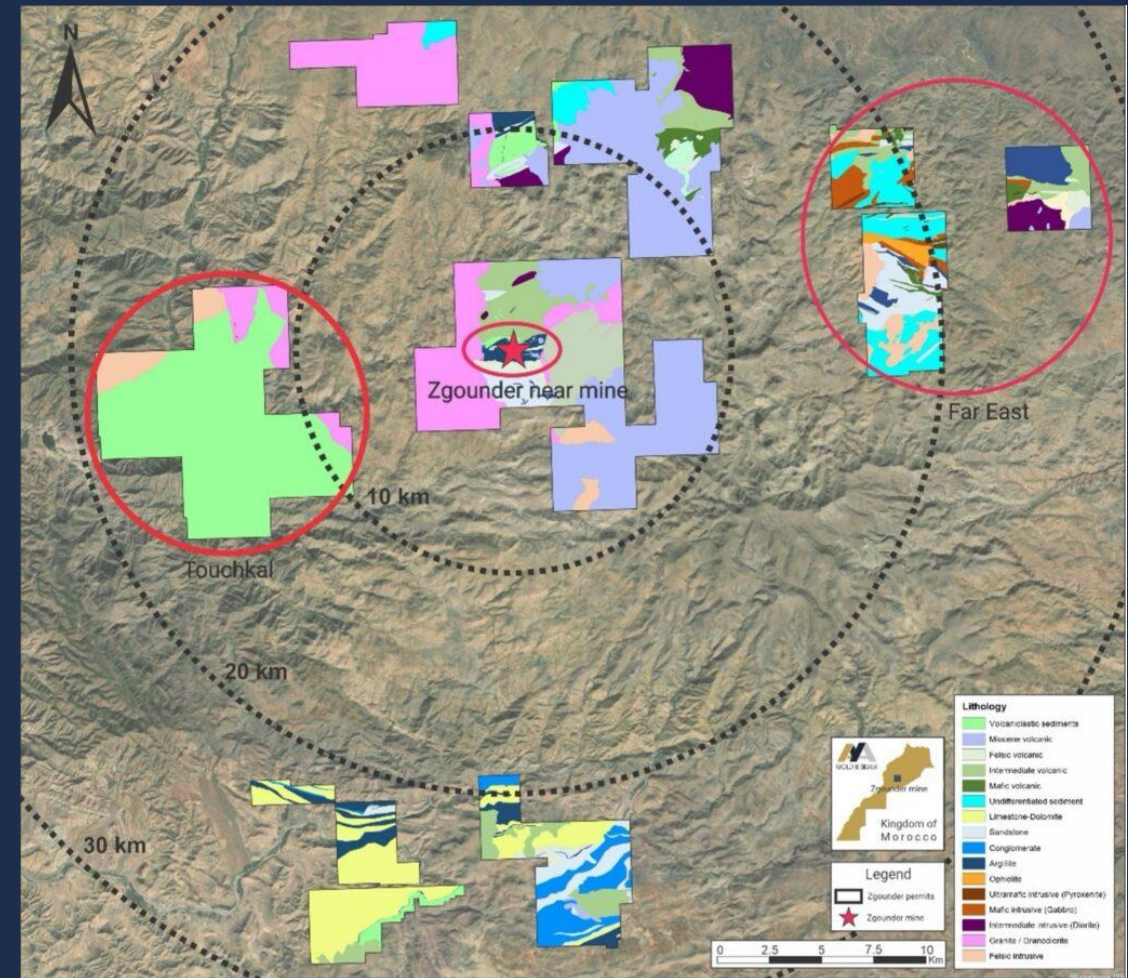


Figure: Surface Map of Zgounder Property with Simplified Geology

Zgounder Regional / Regional Mapping and Prospecting

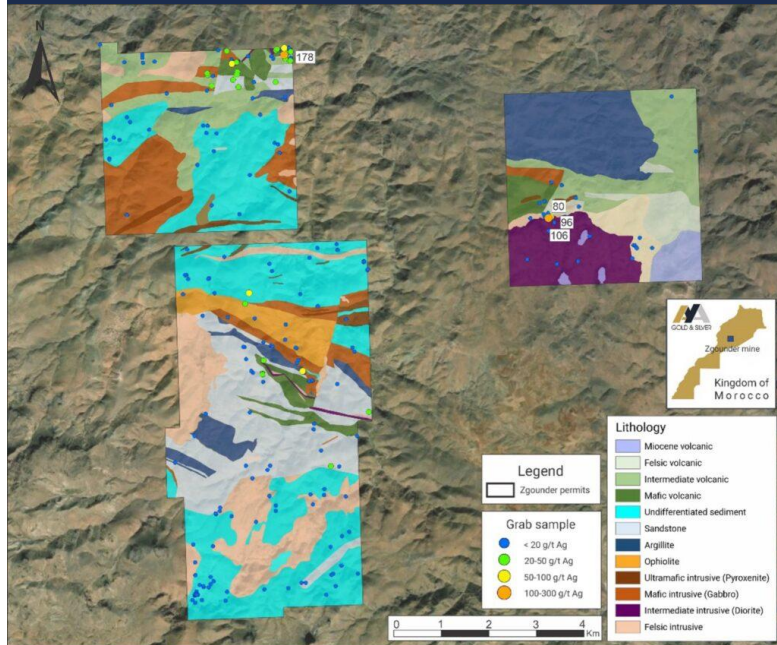


Figure: Surface Map of Zgounder Far East with Simplified Geology and Ag Grab Samples

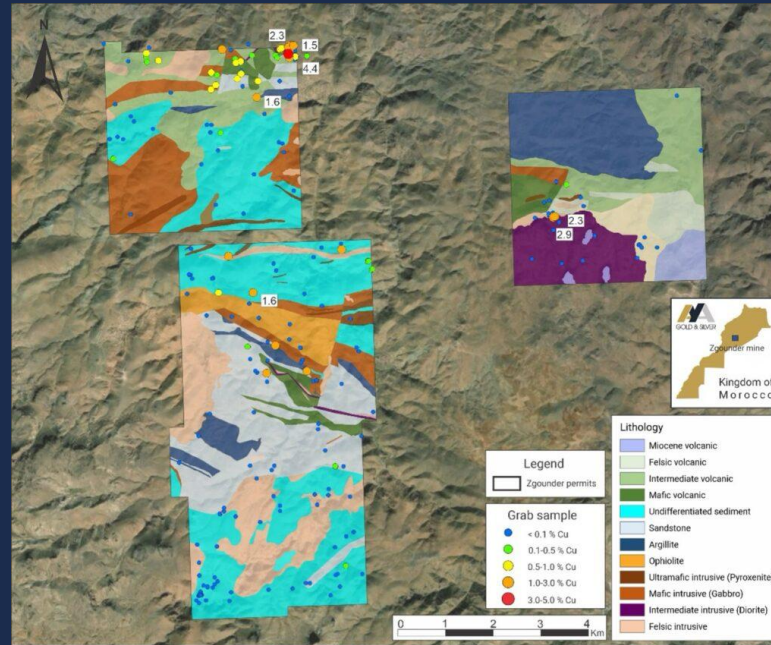


Figure: Surface Map of Zgounder Far East with Simplified Geology and Cu Grab Samples

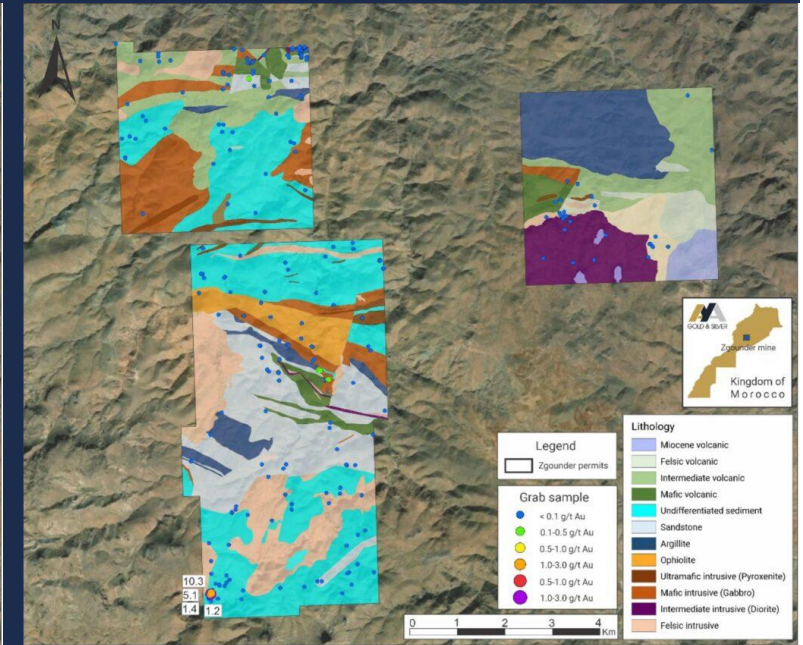


Figure: Surface Map of Zgounder Far East with Simplified Geology and Au Grab Samples

Grab sample results have identified some high-grade grab Ag-Cu, and Au, along with many precious metal anomalies, indicating a strong mineralization potential within 20km of the Zgounder deposit.

Boumadine / 2025 Updated MRE (Ag, Au, Cu, Pb, Zn)

Highlights¹

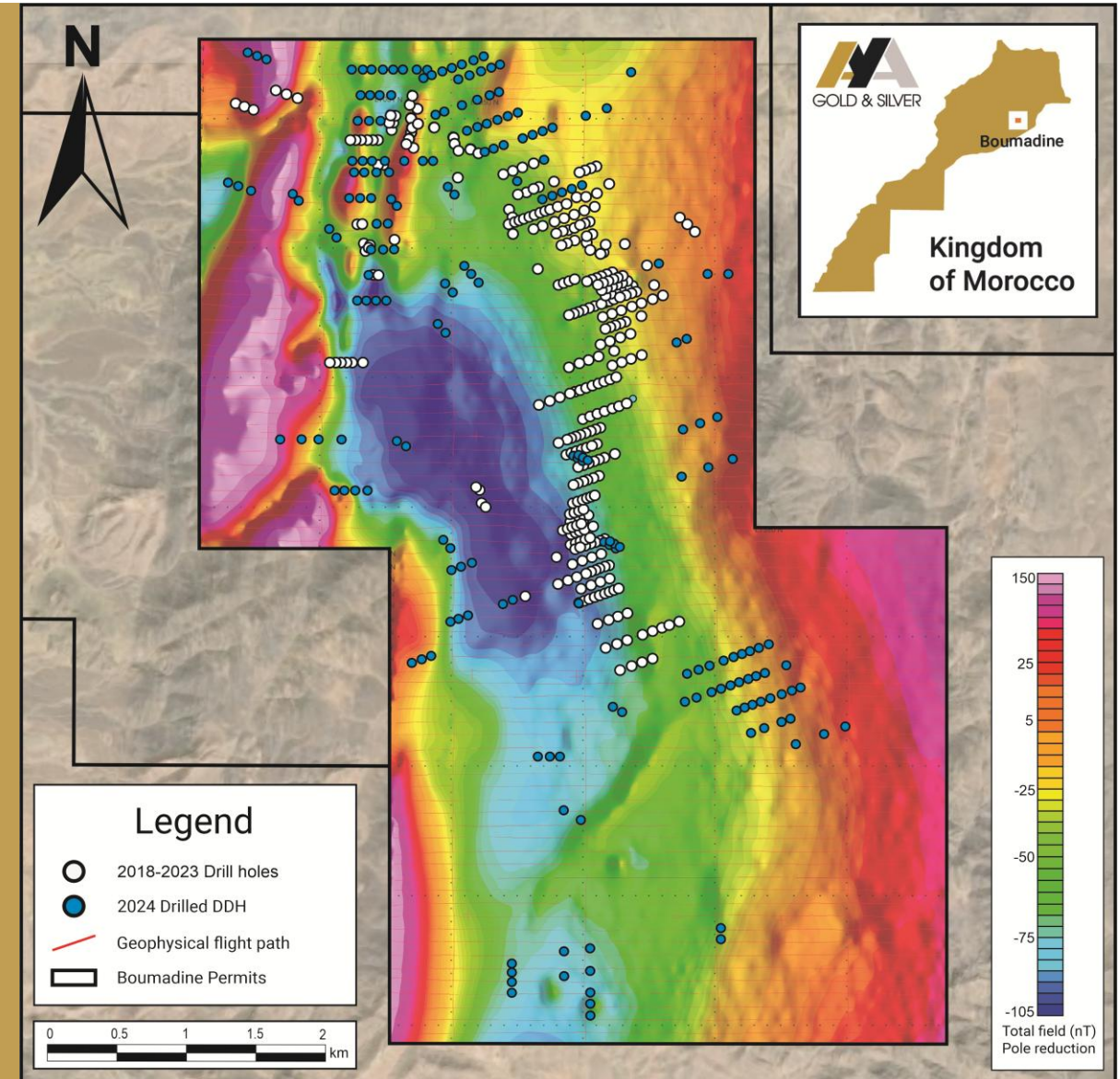
Indicated resources of 5.2Mt at 91 g/t Ag, 2.78 g/t Au, 2.8% Zn and 0.85% Pb containing an estimated **15.1 Moz** of Ag, 449 koz of Au, 145 kt of Zn and 44 kt of Pb, **representing 74.4 Moz AgEq, a 120% increase over April 2024 MRE.**

Inferred resources of 29.2Mt at 82g/t Ag, 2.63 g/t Au, 2.11% Zn and 0.82% Pb containing an estimated **76.8 Moz** of Ag, 2.4 Moz of Au, 615 kt of Zn and 237 kt of Pb, **representing 378 Moz AgEq, an 19% increase over the April 2024 MRE.**

49% of the inferred mineral resource is pit-constrained, and 51% is underground

Rapid resource delineation with **+138 km** drilled in < 3 years

Potential to **expand the deposit in all directions**



Potential to increase deposit in **all** directions

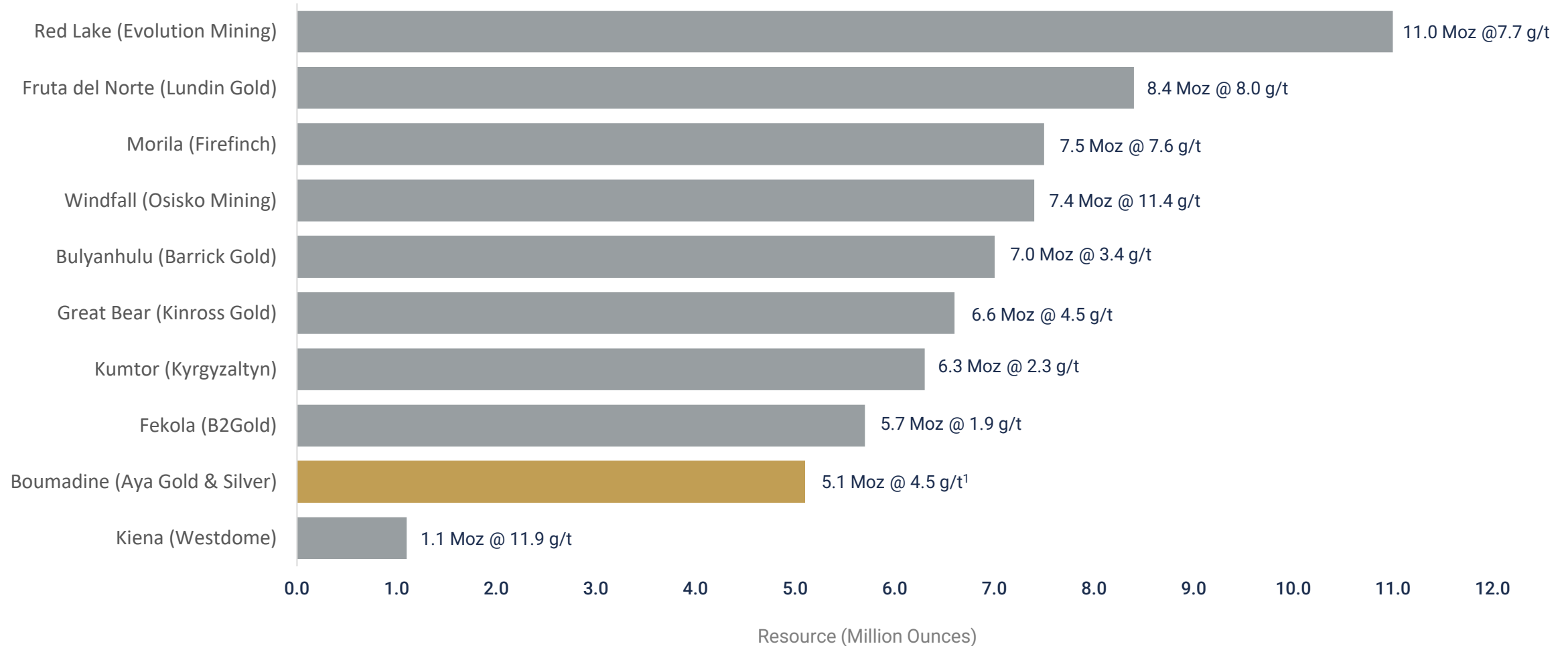
	Cutoff	Tonnes	Average Grade ²							Contained Metal ²						
	NSR US\$/t	(kt)	Ag	Au	Cu	Pb	Zn	AgEq	AuEq	Ag	Au	Cu	Pb	Zn	AgEq	AuEq
			(g/t)	(g/t)	(%)	(%)	(%)	(g/t)	(g/t)	(koz)	(koz)	(kt)	(kt)	(kt)	(koz)	(koz)
Pit-constrained Indicated	95	3,920	94	2.99	0.13	0.84	2.95	476	5.30	11,881	343	5	33	116	60,051	667
Pit-constrained Inferred	95	14,258	90	2.89	0.10	0.81	2.38	450	5.00	41,135	1,102	14	115	339	206,293	2,293
Out-of-pit Indicated	125	1,249	80	2.11	0.08	0.87	2.32	358	3.98	3,216	106	1	11	29	14,382	160
Out-of-pit Inferred	125	14,938	74	2.39	0.07	0.82	1.85	357	3.97	35,669	1,294	10	122	276	171,393	1,905
Total Indicated	95/125	5,169	91	2.78	0.12	0.85	2.80	448	4.98	15,097	449	6	44	145	74,433	827
Total Inferred	95/125	29,196	82	2.63	0.08	0.82	2.11	402	4.47	76,804	2,396	25	237	615	377,686	4,198

¹As at February 24, 2025

² Refer to Aya Gold & Silver's February 24, 2025 press release.

³ The mineral resource has been estimated based on an Ag price of US\$24/oz with a process recovery of 89%, an Au price of US\$2,200/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 / Accelerating Development



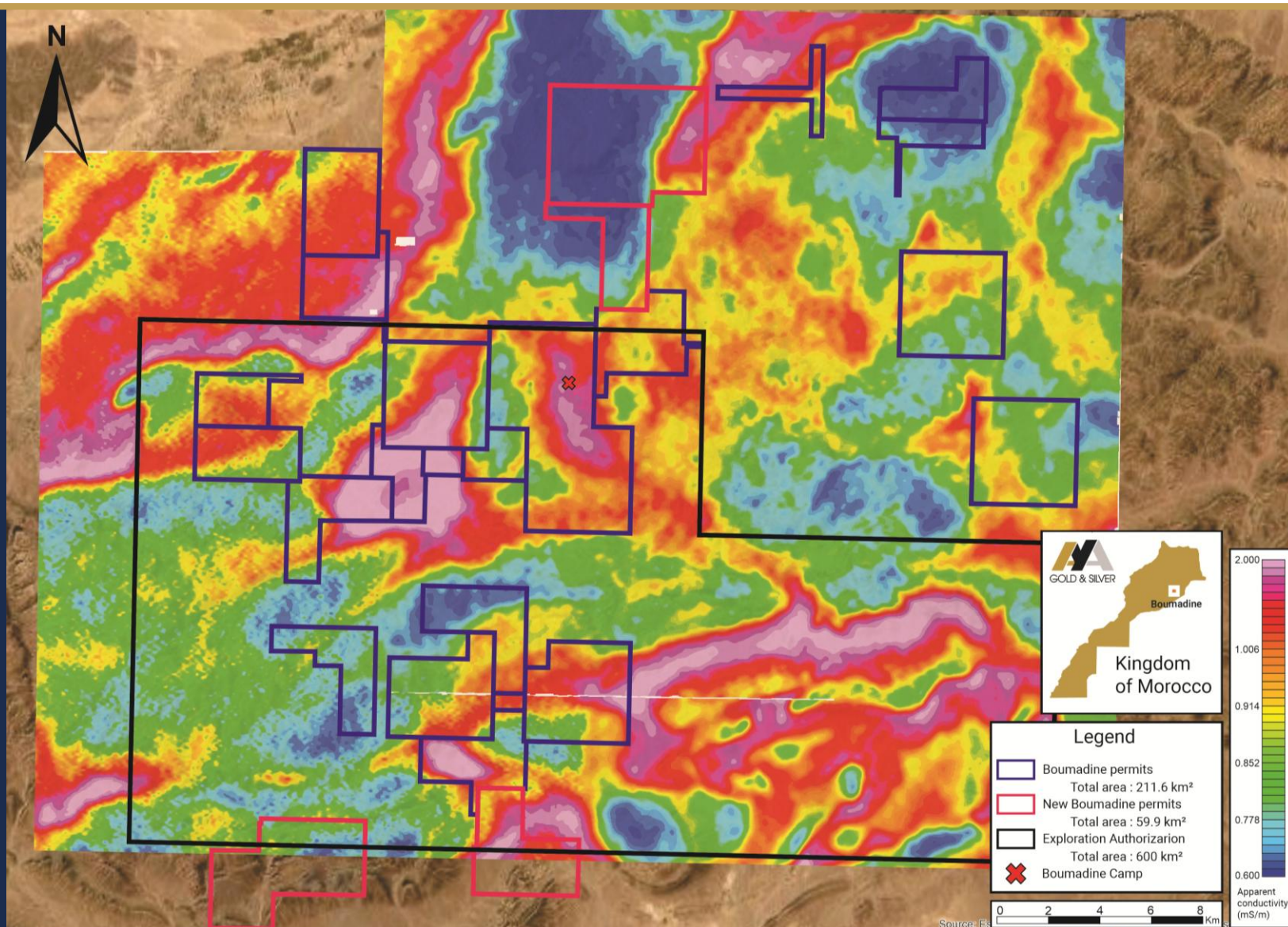
Source: Company reports

1. Refer to Aya Gold & Silver's February 24, 2025 press release and Aya's technical report for the Boumadine Project titled "Technical Report – Updated Mineral Resource Estimate of the Boumadine Polymetallic Project, Kingdom of Morocco" available on ayagoldsilver.com or SEDAR+.

Boumadine (Au, Ag, Pb, Zn) / Development

- Acquired four (4) mining licenses **totaling 59.9km²** in the Boumadine area → expanded the Boumadine exploration footprint by 28.3% to over 272km².*
- **Secured a 600km² exploration authorization** surrounding Boumadine, allowing Aya to carry out exploration activities and provides Aya with priority over any unclaimed land within the authorized area.*

*Refer to Aya Gold & Silver's February 4, 2025 press release.

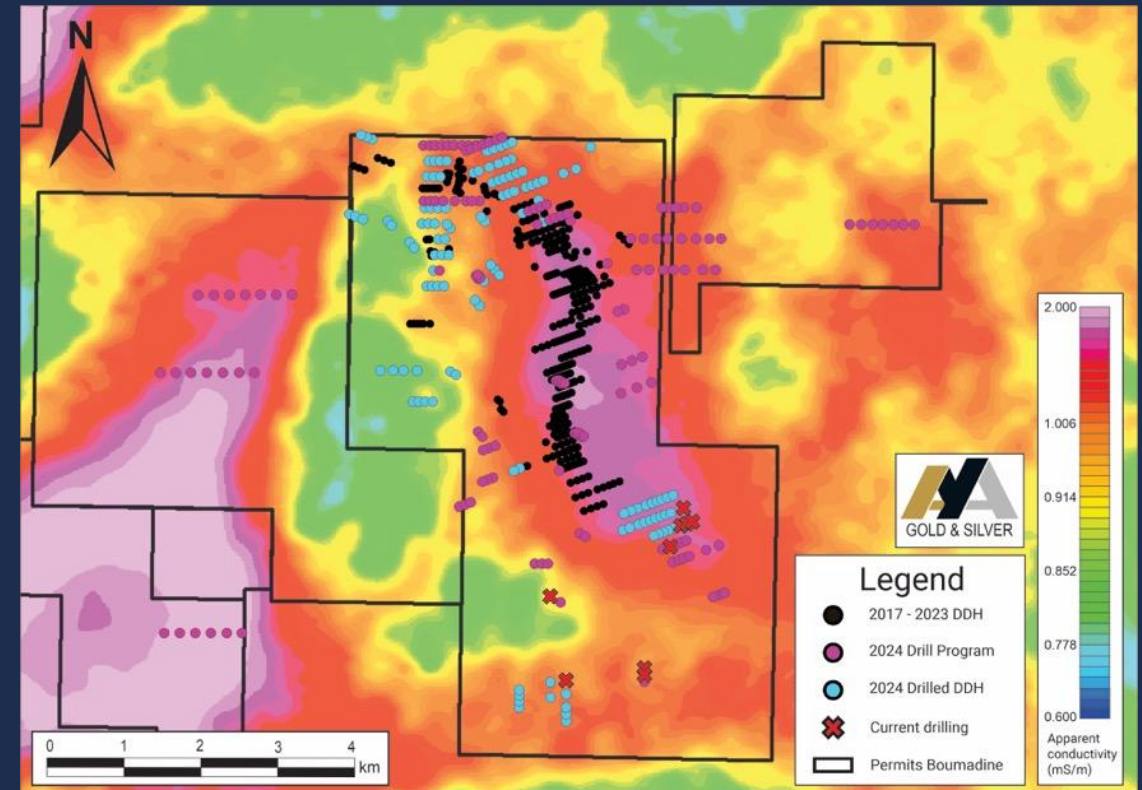


Through drilling¹

- 39,600m of 100,000 - 140,000m drill program completed
- Drilling confirmed continuity of Boumadine deposit and extended the strike length of the Tizi Zone from 2.0 km to 2.2 km.
- New targets identified in 2024 were drill tested. These results are pending.

Through fieldwork^{1,2}

- Mapping and prospecting completed on 20 new permits
 - Hyperspectral completed on most of the new permits
- The 13,710-line km MobileMT geophysical survey identified:²
 - **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



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

¹ Refer to Aya Gold & Silver's May 13, 2025, January 21, 2025, 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, September 16, November 14, 2024 press releases.

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

Boumadine / Expanded Footprint, Multiple New Conductive Anomalies

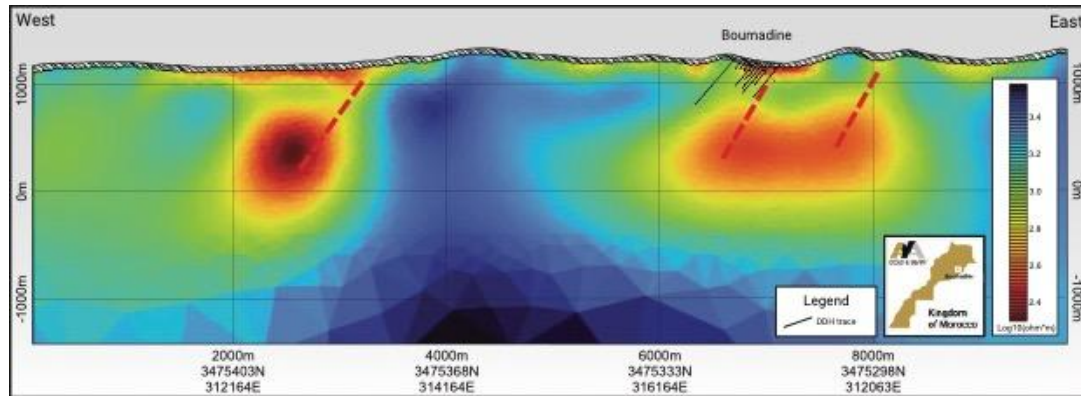


Figure – Preliminary Results – Section L2100 Passing through Boumadine – Apparent Conductivity with Drill Holes (target in dashed red)

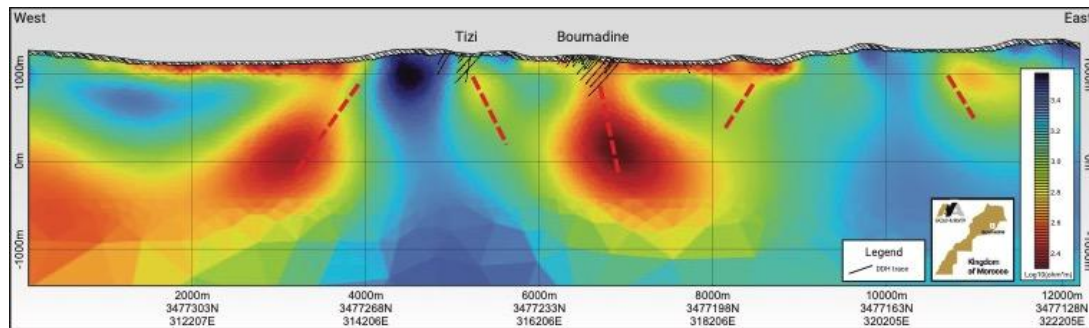
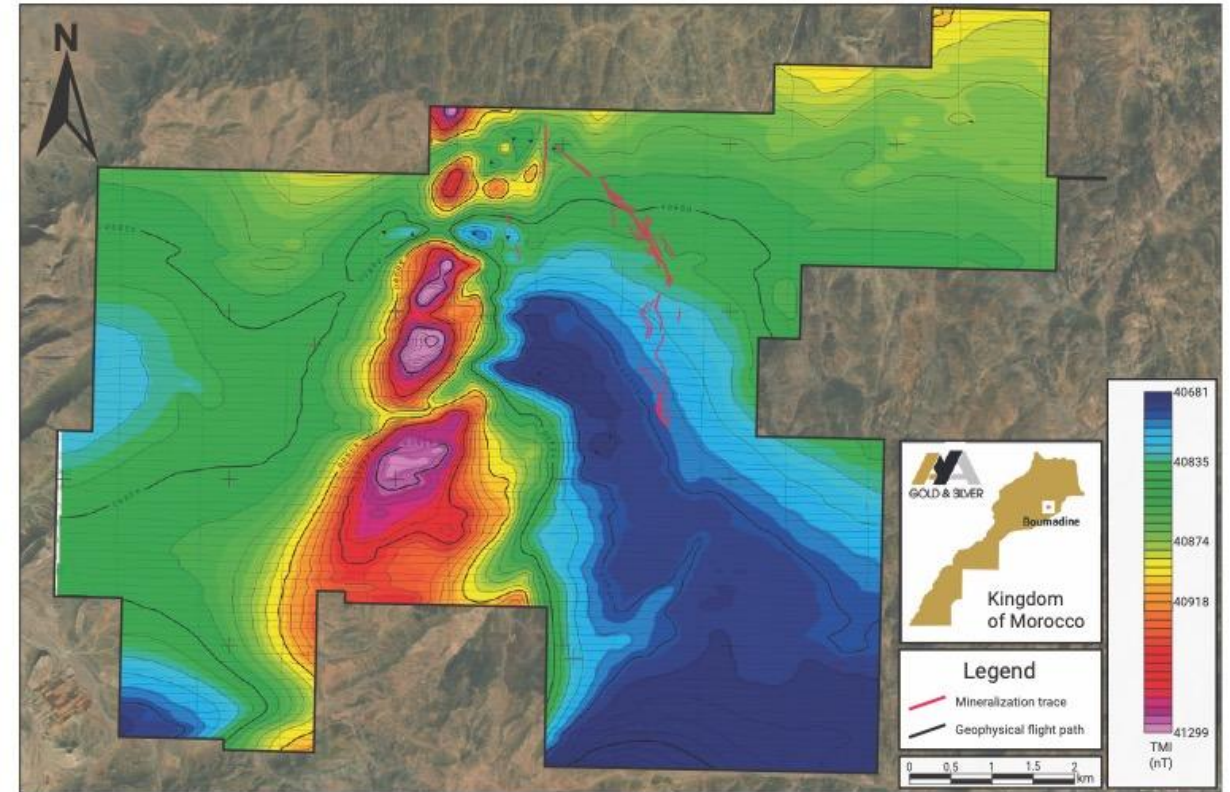


Figure – Preliminary Results – Section L2290 Passing through Boumadine and Tizi – Apparent Conductivity with Drill Holes (target in dashed red)



Preliminary Results – Total Magnetic Intensity (w/ mineralization trace at surface in red)

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

Creation of Mx2 Mining, a North African-dedicated gold growth company backed by Aya¹

Amizmiz Gold Project (Morocco):

- Mx2 acquired 100% interest in Amizmiz
- Historic resource of 342,000 oz at 12.98 g/t Au
- 2,800m drill program to begin in 2025

Experienced Aya team and board, and senior mining executives from Red Back Mining, Orca Gold, and Montage Gold.

- Mx2 completed a brokered private placement, raising C\$16M²
- Aya contributed C\$1M²

Aya received \$10M in share consideration from Mx2 through the spinout, now owns 42.3% of Mx2:

- Aya to be the largest shareholder of Mx2, focused on untapping the potential of Amizmiz and Tijirit

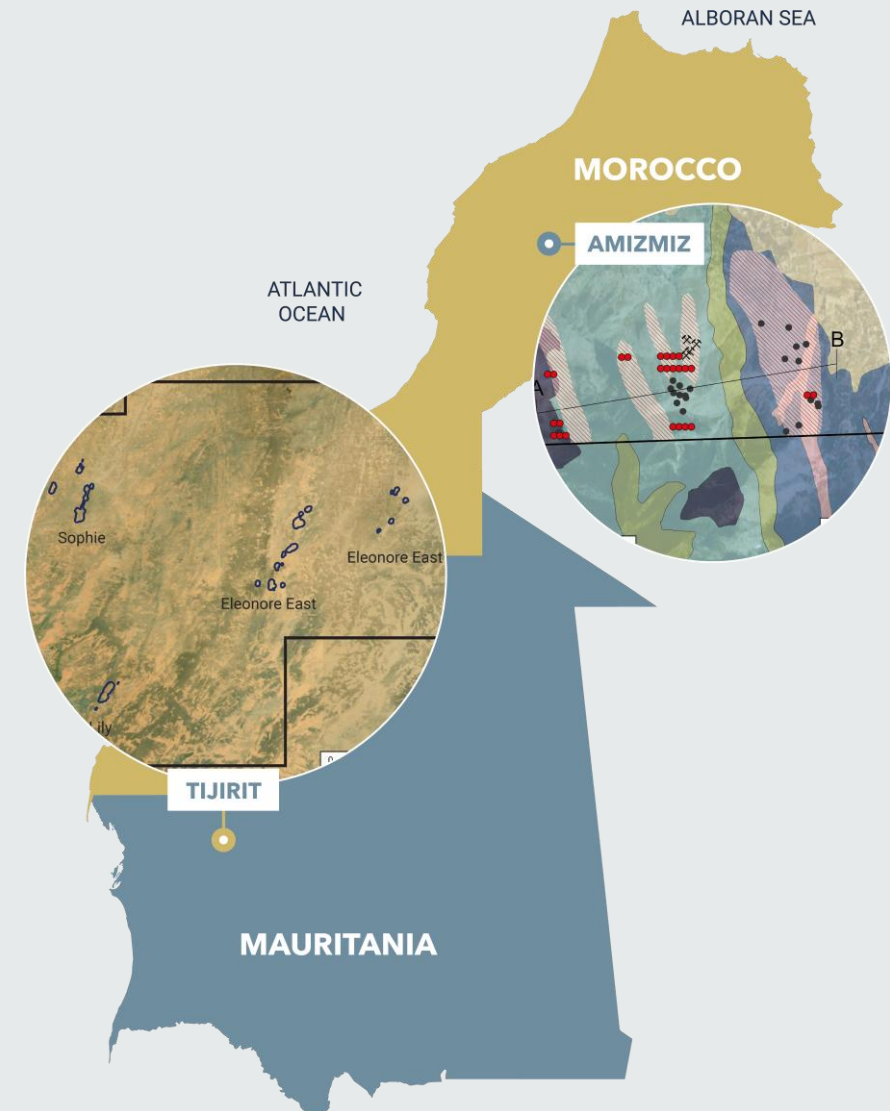
Benoit La Salle and Ugo Landry-Tolszczuk appointed to the Mx2 Board of Directors

Completion of Transaction announced April 16, 2025³

¹Refer to Aya's September 12, 2024 press release.

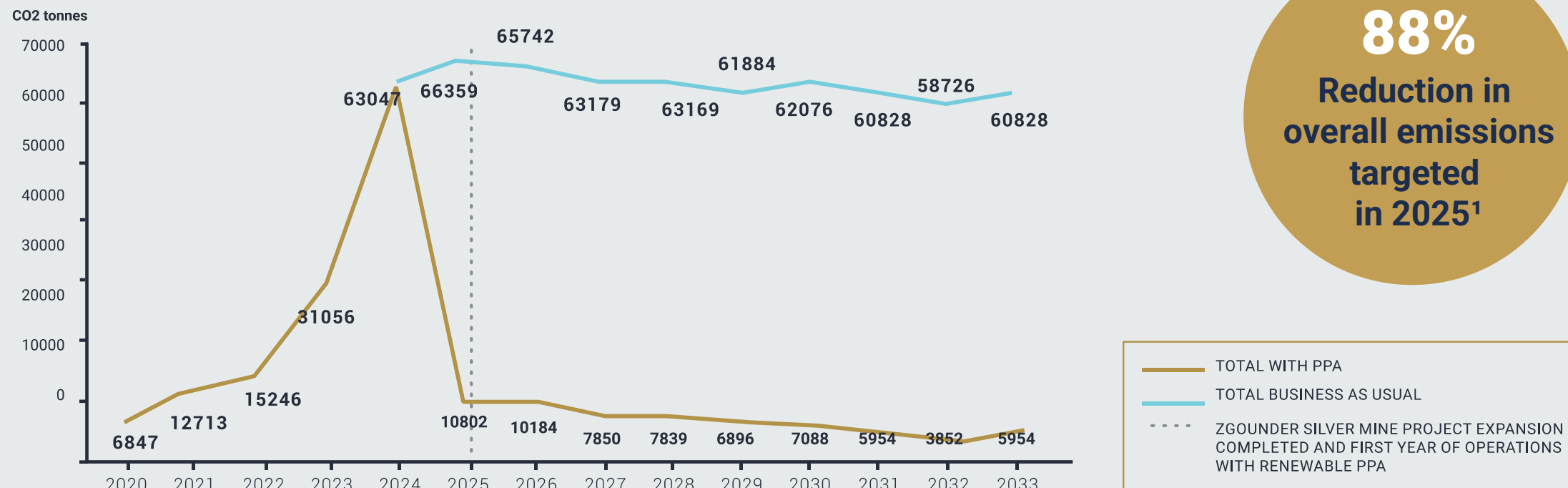
²Refer to Mx2 Mining's October 1, 2024 and November 20, 2024 press releases.

³ Refer to Aya's news release dated April 16, 2025.



Zgounder / Near-term Decarbonization Objectives

Estimated total GHG emissions for the Zgounder Silver Mine



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

Aya / Implementation of High Governance Standards

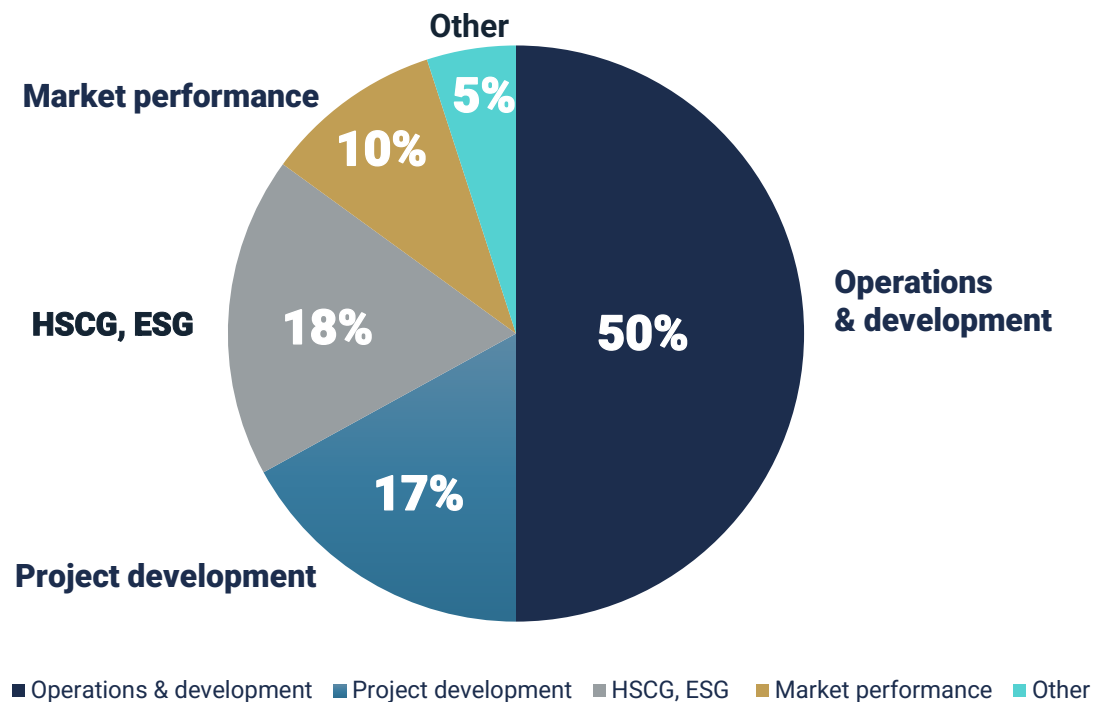
Achieved in the last three years since arrival of new management team

38% Women board members

88% Director independence

15% Board & management holdings
(As of Dec. 31, 2024)

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:





Low-Carbon Strategy and Environmental Commitment

Priorities: reduce energy and water use, biodiversity. Achieve Near-zero Scope 2 emissions in 2025.



65%
Water recycled

Ongoing
Global Industry Standard on Tailings Management



7,671t
CO₂e emissions avoided in 2024

88%¹
Reduction in Scope 2 emissions targeted in 2025



Embedding a Health and Safety Culture

Priorities: zero fatalities, lower LTIFR and TRIFR, operational surface fire brigade team.



Ongoing
Best practices for risk management



0 fatalities
Reported in 2024



12,907 hours
of H&S training in 2024



Supporting our Social License

Priorities: increase female headcount, reduce employment turnover and implement comms and awareness programs on Aya policies.



40%
Local workforce



99%
National workforce



11%
female employees



15,430
training hours provided to Aya workforce

¹ Target reduction compared to 2021, Aya’s base year for calculations.

2025 Catalysts

- | | | |
|---|-------------------------------------|---------|
| Commenced 2025 drill program | ☒ | 2025 |
| Commenced Boumadine PEA | ☒ | 2025 |
| Reached 3,000tpd processing capacity at Zgounder
<i>ramping up to steady state</i> | ☐ | 2025 |
| Mid-Year Update on Boumadine Metallurgy and PEA | ☐ | H2 2025 |
| Publish updated Zgounder MRE | ☐ | Q4 2025 |





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