

AYA GOLD & SILVER ZGOUNDER SILVER MINE, MOROCCO

ENVIRONMENTAL AND SOCIAL ACTION PLAN (ESAP) – FINAL

N°	Action	Environmental & Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Good Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status
PR1	Assessment and Management of Environmental and Social Risks and Impacts						
1.1	Submit an environmental and social (E&S) report to the EBRD on the environmental and social performance of the Project and the status of the implementation of this ESAP.	EBRD E&S Reporting requirement.	EBRD Performance Requirement (PR) 1	Aya	During construction, commissioning and first year of operations: every 4 months. Operations onwards: annually.	Environmental and social reports (template to be provided by the EBRD) and ESAP progress updates.	
1.2	Complementary social baseline surveys should be performed to inform and update the EIA and associated plans like the Stakeholder Engagement Plan (SEP) and the Land Acquisition and Livelihood Restoration Plan (LALRP). These surveys should provide relevant information in the Project's area of influence with a focus on economic activities, natural resources use, ecosystem services, land use, cultural heritage and habitat. Vulnerable groups should be identified. Impacts should be assessed and duly justified. Special attention to be given to gender, conflict on natural resources use (water and pasture) and the impacts of the influx of external workers.	Appropriate management of social risks and impacts.	EBRD PR1	Aya	Completed prior to 2 nd disbursement.	Social Baseline surveys and social impacts assessment finalised.	
1.3	A supplementary air emissions modelling study should be performed to confirm and inform air emission impacts on potentially sensitive receptors (human and biodiversity). This should include baseline sampling which can be done as part of the planned air quality monitoring programme (see ESAP 3.6 below).	Appropriate management of E&S risks and impacts.	EBRD PR1	Aya	Within 1 year of financial close	Air emission modelling report. Air quality management plan.	
1.4	A supplementary noise modelling study should be performed to confirm and inform noise impacts on potentially sensitive receptors (human). This should include baseline sampling which can be done as part of the planned noise monitoring programme (see ESAP 3.7 below).	Appropriate management of E&S risks and impacts.	EBRD PR1	Aya	Within 1 year of financial close	Noise modelling report. Noise management plan.	
1.5	Undertake an assessment of environmental and social impacts potentially associated with the power line and integrate appropriate mitigation measures into the design, construction and operation of the line where relevant. This would require including measures and requirements in contractor contracts to manage E&S risks and impacts appropriately. The assessment will be commensurate with the impacts associated with the project and amongst others, consider impacts to biodiversity (see ESAP actions 6.2, 6.3, 6.4 and 6.6) and to land owners and land users (see ESAP action 5.2).	Appropriate management of E&S risks and impacts.	EBRD PR 1 GIP	Aya	Prior to construction of the power line but noting the timetable for relevant PR5 and PR6 ESAP actions.	Assessment and mitigation of impacts associated with the power line.	
1.6	Draft Health, Safety, Environment and Community (HSEC) management plan, including monitoring programmes, should be developed into a detailed and comprehensive HSEC management plan referencing supporting topic-specific management and monitoring plans or procedures covering soils and erosion control, water supply and use, air quality (dust and emissions), noise, blasting, biodiversity, traffic, influx, community H&S, OHS and closure.	Appropriate management of E&S risks and impacts.	EBRD PR 1 Good International Practise (GIP)	Aya	Construction related aspects of HSEC management plan and E&S management plans, including supporting plans and procedures – prior to major construction works commencing.	Finalised HSEC management plan and full set of topic-specific E&S management plans/procedures.	

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					Remaining aspects of HSEC management plan and E&S management plans (including operational aspects) – within 1 year of financial close		
1.7	Complete the full development and implementation of the Environmental and Social Management System (ESMS), including occupational and community health and safety.	Appropriate management of E&S risks and impacts.	EBRD PR 1 GIP	Aya	Within 1 year of financial close	Appropriate ESMS in place and implemented. Full implementation of the ESMS will be demonstrated through monitoring program reports	
1.8	Ensure that appropriate resources are in place in manage E&S risks and impacts, including with respect to land acquisition, human resources and stakeholder engagement, and the implementation of this ESAP.	Appropriate management of E&S risks and impacts.	EBRD PR1, EBRD PR2	Aya	Prior to major construction works commencing.	Details of E&S resources, including an organogram.	
PR2	Labour and Working Conditions						
2.1	<p>An HR policy should be drafted and be aligned to Moroccan legislation, applicable ILO conventions and EBRD PR2. Policy should be disseminated among workers. Typical content of HR Policies will include:</p> <ol style="list-style-type: none"> 1. Working Conditions and Management of Worker Relationship: <ul style="list-style-type: none"> - Human Resources Policy - Working Relationship , Working Conditions & Terms of Employment - Workers’ Organizations - Non-Discrimination & Equal Opportunity - Retrenchment - Grievance Mechanism 2. Protecting the Workforce <ul style="list-style-type: none"> - Child Labour, Forced Labour 3. Occupational Health & Safety 4. Non-employee workers 5. Supply Chain <p>HR Procedures need to explain step-by-step how the requirements of the HR policy (and requirements of PR2) are implemented.</p> <p>Confirmation that all workers will have signed written contracts stipulating working conditions and terms of employment.</p>	Appropriate management of company and contractor labour risks.	EBRD PR2	Aya	Within 2 months of Financial Close	<p>Written HR Policies and Procedures document.</p> <p>Proof of resources allocation for HR Policy and procedures.</p> <p>Provide example of a standard employment contract.</p>	
2.2	<p>Provide workers’ grievance mechanism for workers and contractors.</p> <p>Provide evidence of disclosure of grievance mechanism to workers and contractors in workforce language.</p>	Improved employee/contractor relationship with management	EBRD PR2	Aya Contractors	Within 2 months of Financial Close	<p>Written grievance mechanism procedure.</p> <p>Examples of notification of grievance mechanism procedure in dominant language(s)</p>	
2.3	Workers right to join labour unions for the purpose of furthering and defending their interest with regard to working conditions and terms of employment should be incorporated in the employment conditions and HR Policy. Workers should be clearly made aware of their rights.	Improved employee/contractor relationship with management	EBRD PR2,	Aya	Within 2 months of Financial Close	Proof of inclusion on HR policy and contracts.	

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						Proof of communication with workers regarding organizations.	
2.4	Conduct labour audits during the construction phase (every six months) and during operations (annually). The frequency of audits to be reviewed with the EBRD following initial audit reports	Improved employee/contractor relationship with management.	EBRD PR2, EBRD PR4	Aya	From start of and during construction – every six months. During operations – annually.	Labour audit reports and corrective action plans. Included in reporting to EBRD.	
2.5	Policy on Non-discrimination and equal opportunity drafted and incorporated into the HR policy. Include aspect of communication on recruitment as part of the SEP.	Non-discrimination and equal opportunity	EBRD PR2	Aya	Within 2 months of Financial Close	Non-discrimination and equal opportunity Policy included in HR policy and procedures. Proof of implementation: monthly reports.	
2.6	HR Policy should indicate that the company aligns with Morocco's legislation on child labour and PR2 requirements.	Child labour and reputational risk.	EBRD PR2	Aya	Within 2 months of Financial Close	Child labour clause included in the HR Policy Proof of monitoring age of employees Monthly reports	
2.7	Employment policy should indicate that forced labour will not be used.	Forced labour and reputational risk.	EBRD PR2	Aya	Within 2 months of Financial Close	Forced labour clause included in HR policy Proof of monitoring use of forced labour Monthly reports.	
2.8	Ensure that an appropriate Supply Chain Management System or similar is in place and implemented.	Effective oversight of labour rights within the primary supply chain	EBRD PR1, EBRD PR2	Aya	Prior to major construction works commencing.	Supply chain management system or similar.	
2.9	The contractors or third-party monitor must be contractually responsible for monitoring that labour rights and working conditions are upheld and PR2 requirements are met for third party workers.	Labour rights risk management.	EBRD PR2	Aya, Contractors	From start of and during construction – every six months.	Proof of development of management and monitor procedures for Third Party/contractors. Proof of implementation: meeting minutes, monthly reports.	
PR3	Resource Efficiency and Pollution Prevention and Control						
3.1	Prepare a detailed water management plan intended to be implemented for the mine. This note should pull together the findings of various studies undertaken to date to present a comprehensive and overarching report that incorporates climatic data considered in the design of facilities including forward projecting climate conditions for water supply, flood risk management, geochemical risks and associated mitigation measures, and discharge water treatment requirements (volumes, treatment process, waste/residue management). The note should consider the potential	Management of flood and contamination risks	EBRD PR3 GIP	Aya	Within one year of financial close.	Detailed water management plan.	

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	impacts on community water supply within the Project's area of influence. A detailed monitoring programme should be included.						
3.2	Carry out a census or survey of downstream water uses including allocation of water from the system and reliance on flooding (if any). This data should then be used to review the assessment and conclusions of potential impacts on downstream water users. Where needed, mitigation measures will be identified and implemented to minimise water supply impacts on downstream water users.	Water supply management	EBRD PR3 GIP	Aya	Prior to second disbursement (as part of social survey)	Census/survey report on downstream water uses	
3.3	The following will be undertaken: <ul style="list-style-type: none"> A detailed water balance will be developed, maintained, and reported annually to the EBRD. Specific water uses (measured by volume of water used per unit production) will be assessed. Benchmarking against available industry standards for water use efficiency. Opportunities for continuous improvement in terms of water use efficiency and recovery. 	Management of high water demands	EBRD PR3	Aya	Within 1 year of Financial Close and then annually thereafter	Water balance report including quantified water uses	
3.4	The elevated lead and cyanide concentrations from the soil surveys completed in 2021 should be investigated further through further monitoring and consideration of background levels. Based on the results of the monitoring undertake a risk assessment (source, pathway, receptor) and determine whether actions are necessary to address potential contamination and risks to potential receptors.	Pollution remediation	EBRD PR3 GIP	Aya	Within 1 year of Financial Close and further monitoring where necessary.	Investigation report with action plan to inform next steps	
3.5	Assess if historically contaminated soils exist at the mine site, more specifically at the existing cyanidation plant and downstream of the existing tailings facilities and process ponds. Where contamination exists, conduct a risk assessment (source, pathway, receptor) and, depending on the outcomes and potential risks to receptors, develop a remediation or corrective action plan and implement it at the appropriate time (depending on the risk assessment). In addition measures to prevent future contamination of soil resources should be identified and implemented.	Pollution remediation	EBRD PR3 GIP	Aya	Assessment within 1 year of Financial Close. Remediation plan or corrective action plan timing as per assessment.	Investigation and assessment report with action plan to inform next steps	
3.6	Develop a blast management plan to ensure necessary measures are embedded into the design of blasts.	Control of blast risks	GIP	Aya Contractor	Within 1 year of Financial Close	Blast management Plan.	
3.7	As part of the first round of air quality monitoring, include an inventory of all air emission sources including emission rates, delineate on a map potentially sensitive receptors, quantify emissions at the site boundary and, develop an air quality management plan and use the modelling results to refine the ongoing monitoring programme.	Pollution prevention and management of community risks	EBRD PR3 GIP	AYA Air quality specialist	Within 1 year of Financial Close	Air quality study with action plan to inform next steps. Air quality management plan.	
3.8	As part of the first round of noise monitoring, include an inventory of all noise sources including their sound power levels, delineate on a map potential sensitive receptors, quantify emissions at the site boundary and receptor sites and use the modelling results to refine the ongoing monitoring programme.	Pollution prevention and management of community risks	EBRD PR3 GIP	Aya Noise specialist	Within 1 year of Financial Close	Noise study with action plan to inform next steps. Noise management plan.	

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	Include the mine site and transport route where this passes through villages.						
3.9	Acid generating rate and risk from the rock and tailings should be re-assessed following the kinetic testing, which is underway.	Pollution prevention	GIP	Aya Qualified consultant	Prior to final design of waste rock and new tailings facility	Kinetic test work results confirming acid generating potential of waste rock and tailings with action plan for next steps.	
3.10	Develop a detailed non-extractive waste management plan, or enhance the existing plan, that reflects the planned waste sorting, handling and management at the mine, including a chain of custody for waste removed for off-site disposal.	Pollution prevention	EBRD PR3 GIP	Aya	Within 1 year of Financial Close	Non-extractive waste management plan.	
3.11	Investigate options for the re-use and/or disposal of mercury from the cyanidation process. Develop a mercury-specific management plan.	Pollution prevention	EBRD PR3 GIP	Aya	Within 1 year of Financial Close	Mercury management plan.	
3.12	Develop the chemical products management plan.	Pollution prevention	EBRD PR3 GIP	Aya	Within 1 year of Financial Close	Chemical Products Management.	
PR4	Health, Safety and Security						
4.1	Community Health and Safety Management Plan and Traffic and Road Safety Management Plan to be developed. Such plans, or other plans where relevant, will define measures to manage risks associated with increased work numbers particularly contractors during the construction phase including community interaction risks, worker accommodation, influx risks (if any, etc.), etc.	Mitigate risks from construction and operational hazards.	EBRD PR1, EBRD PR4	Aya	Prior to major construction works commencing	Community Health and Safety Management Plan, Traffic and Road Safety Management Plan.	
4.2	All contracts between Aya and contractors must include E&S provisions to be aligned with Aya's requirements on OHS and labour and working conditions as per EBRD PR2. Specific monitoring and follow up mechanism should be established and carried out on a regular basis to ensure E&S compliance of contractors.	Management of OHS related risks and incidents.	EBRD PR1, EBRD PR2, EBRD PR4	Aya, contractors	Contracts to include necessary provisions prior to any works commencing by respective contractors Specific mechanism to start before construction and follow up from start of and during construction – every six months.	Inclusion of specific clause with contractors in line with EBRD PRs. Mechanism/procedure drafted and carried out. Number of monitoring visits/meetings with contractors per monthly reports. Number of incidents at contractors' level.	
4.3	New tailings facility to be designed and operated in line with the Global Industry Standard on Tailings Management (GISTM).	Tailings facility failure	EBRD PR4	Aya	Prior to construction of facility	Tailings facility aligned with GISTM requirements.	
4.4	Develop a systematic approach to correcting inherited H&S risks identified within the design of infrastructure and equipment.	Corrective management of inherited risks	EBRD PR4	Aya	Within 1 year of Financial Close	Corrective action plan addressing H&S risks on site.	
4.5	Emergency Response and Preparedness plan to be finalized. In reviewing and developing their emergency preparedness and response plans Aya should involve the appropriate stakeholders.	Emergency preparedness	EBRD PR4	Aya	Prior to major construction works commencing	Revised Emergency Preparedness & Response Plan Training materials Evidence of stakeholder consultation and involvement in training and drills as relevant.	

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4.6	Review and document security arrangement to ensure alignment with PR4 and GIIP, for example, relevant UN Voluntary Principles on Security and Human Rights.	Management of security risks	EBRD PR2 EBRD PR4 GIP	Aya, Security Contractor	Prior to major construction works commencing	Provision of Security Management Plan including security risk assessment. Evidence of regular monitoring of provision of contracted security services.	
4.7	Plan and implement awareness training of all staff on gender based violence and harassment.	Management of risks among workers and communities	EBRD PR4 GIP	Aya	Plan within 1 year of Financial Close Annual implementation of awareness program	Awareness plan in place and implemented. Annual records on implementation.	
4.8	Review appropriateness and adequacy of rehabilitation and closure budget to manage the integrity of the facilities that will remain at closure.	Management of risks to communities	EBRD 4 GIP	Aya	Within 1 year of Financial Close	Revised rehabilitation and closure budget.	
PR5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement							
5.1	Social surveys to identify livelihood activities that might be impacted by mine footprint to determine potential eligibility for livelihood restoration and compensation measures.	Management of social license and reputational risks.	EBRD PR5	Aya	Prior to second disbursement.	Social baseline and social impact assessments reviewed	
5.2	EBRD PR5 compliant Land Acquisition and Livelihood Restoration Plan to be prepared, including: <ul style="list-style-type: none"> - legal framework, - institutional arrangements, roles and responsibilities, - census of affected persons (land tenants, informal land users / herders) - socio survey results including consideration of livelihoods, - details on vulnerable people and the approach during land acquisition and compensation process, - eligibility matrix listing all people eligible for compensation for economic and / or physical displacement and specifying their due compensation (include formal right holders, informal right holders, land users including tenants and sub-leasers), - valuation at full replacement cost, - compensation measures and matrix describing all compensation options and assistance support which will be provided to each category of eligible PAP clearly stating that all compensations will be provided before the loss of asset or imposition of restriction, - livelihood restoration measures to restore and/or improve the standards of living of economically displaced people, - transitional support, - stakeholder engagement and disclosure section for clarity on the activities undertaken so far and those to be carried out including an outline of the interfaces between the LARF and SEP, - grievance redress mechanisms, - budget, - timetable, - monitoring and evaluation per EBRD PR5 provisions. 	Management of social license and reputational risks.	EBRD PR5	Aya	LALRP implemented prior to construction of power line and major construction works commencing	LALRP Measures implemented. Monitoring proof.	

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	For the power line make provision for external independent professional valuation, where required						
PR6	Biodiversity Conservation and Sustainable Management of Living Natural Resources						
6.1	Undertake Baseline studies over a 1-year period (to cover seasonality) within the mine site to determine which species are present (commencing with surveys in spring). This baseline may be included as part of the planned biodiversity monitoring programme.	Biodiversity conservation and management	EBRD PR6	Aya	By end 2023.	Biodiversity Baseline Studies in place.	
6.2	Undertake additional vegetation surveys along the power line route during a period of the year when there is peak vegetation growth, in this case spring, April/May. Update critical habitat assessment, assessment impacts and define mitigation measures. .	Biodiversity conservation and management	EBRD PR6	Aya	By end of spring 2023	Vegetation survey and critical habitat assessment updated with mitigation measures and action plan to inform next steps.	
6.3	Undertake an avian survey along the power line route to coincide with the rains and good vegetation growth as there will be suitable foraging habitat and vegetation cover for breeding birds. Use data to provide more evidence as to whether Priority Biodiversity Features (PBF) bird species are present on Barrage Moukhtar Soussi. Update critical habitat assessment, assessment impacts and define mitigation measures.	Biodiversity conservation and management	EBRD PR6	Aya	By end of spring 2023	Avian survey and critical habitat assessment updated with mitigation measures and action plan to inform next steps.	
6.4	Micro-site power line pylons to avoid the removal or trimming of argan trees.	Biodiversity conservation and management	EBRD PR6	Aya Biodiversity expert	Prior to construction of power line	Map of final power line route showing avoidance of argan trees.	
6.5	Ecosystem Services Assessment to be completed (requires input from the social baseline surveys)	Biodiversity conservation and management	EBRD PR6	Aya	By end Q2 2023	Ecosystem Services Assessment.	
6.6	A Biodiversity Management Plan (for the mine and power line) should be written to specifically include information on: <ul style="list-style-type: none"> The results of the baseline studies Inclusion of any features identified as of conservation concern that require targeted mitigation, Translocation of plants (if needed), Methodology for ongoing monitoring, KPIs and triggers for implementing ameliorative mitigation if needed during the operational phase. Details relating to the reinstatement and management of biodiversity in rehabilitated areas. 	Biodiversity conservation and management	EBRD PR6	Aya	Prior to major construction works and construction of the power line.	Biodiversity Management Plan. Evidence of monitoring available for review.	
6.7	The use of a non-native species for rehabilitation should be fully assessed to ensure that the species can be sustainably managed, and that it will not escape into and damage the wider environment.	Biodiversity conservation and management	EBRD PR6	Aya	Prior to use in rehabilitation and mine closure.	Assessment of use of non-native species for rehabilitation.	
PR8	Cultural Heritage						
8.1	Cultural heritage baseline to be prepared as part of the complementary social baseline surveys (see PR1 on social baseline). Baseline to cover the Expansion Project footprint and transmission line route.	Overlook of cultural heritage artefacts.	EBRD PR1, EBRD PR8	Aya	Prior to second disbursement	Cultural heritage baseline for review. Monitoring pieces of evidence of implementation.	
8.2	Include provisions for engagement with communities within the SEP on cultural heritage.	Cultural heritage engagement	EBRD PR8, EBRD PR10	Aya	Prior to major construction works commencing	Proof of consultation on cultural heritage with affected communities	

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						Provisions in SEP for cultural heritage consultations	
8.3	Cultural Heritage Management Plan to be drafted.	Cultural heritage management	EBRD PR8	Aya	Prior to major construction works commencing	Cultural Heritage Management Plan.	
8.4	Develop and incorporate a Chance Finds Procedure into the HSECMP.	Cultural heritage management	EBRD PR8	Aya	Prior to major construction works commencing	Evidence of CFP within the HSECMP for review.	
PR10	Information Disclosure and Stakeholder Engagement						
10.1	Update the Stakeholder Engagement Plan (SEP) as necessary and implement it. The SEP should provide more details on vulnerable groups and the engagement approach: (i) the cause of their vulnerability / reason for their lower resilience and (ii) the specific engagement approaches / techniques, which will be used to overcome these challenges. The SEP should be disclosed among stakeholders. Conduct consultation meetings with stakeholders, especially affected communities, to inform them about the Project expansion and the transmission line, the ESIA results, the SEP, and the GRM. Follow the EBRD Grievance Management Guidance Note (2012) to ensure compliance of the GRM.	Timely and consistent engagement and information disclosure throughout Project implementation.	EBRD PR10	Aya	Implement SEP prior to the start of construction and continue during construction and operation.	Updated SEP in place and disclosed Proof of ongoing engagement and information disclosure. Evidence of consultation with vulnerable groups	
10.2	Additional staff and resources should be allocated to support the current CLO to ensure the engagement and consultation activities per the SEP and the grievance management per the Grievance Redress Mechanism (GRM) provisions. Include interfaces with related management plans (traffic safety, water, labour influx, community H&S, among others).	Effective management of stakeholder processes.	EBRD PR10	Aya	Prior to construction.	Additional allocated resources for SEP and GRM implementation	