

ESAP (for Samarkand I and II)

NO.	ACTION	REQUIREMENT (LEGISLATIVE, LENDERS, BEST PRACTICE)	RESPONSIBILITY	TIMETABLE	TARGET AND EVALUATION CRITERIA FOR SUCCESSFUL IMPLEMENTATION
Assessment and Management of Environmental and Social Impacts and Issues					
1.1	The Stage III of the National Environmental Impact Assessment will be prepared for all project components. All necessary permits shall be obtained.	National legislative requirements; IFC PS 1; ADB SPS Safeguard Requirement (SR) 1 EBRD PR 1.	Project Company	Prior to commencement of operations.	Regulator approved Stage III national EIA. Permits and approvals.
1.2	Lenders Environmental and Social Impact Assessment with ESMP	IFC PS 1; ADB SPS, SR1, Policy Principles 1, 2 and 3; EBRD PR 1.	Project Company	Prior to signing.	Updated ESIA (or addendum)
1.3	An Environmental and Social Management System will be developed for the projects inclusive of ESIA and ESMP requirements.	IFC PS 1; EBRD PR 1.	ACWA Power corporate Project Company EPC Contractor O&M Company	Construction phase ESMS cleared by Lenders within 3 months after signing or one month before construction, whichever comes first. Operational phase ESMS cleared by Lenders 3 months prior to Commercial Operations Date.	Construction and operational phase ESMS, with site-specific provisions. All requisite E&S management plans in place. Evidence of sufficient resources to implement.
1.4	An Early works' Environmental and Social Management Plan shall be prepared before any activities in site	IFC PS 1; ADB SPS, SR1; Policy Principles 1, 2 and 3; EBRD PR 1.	Project Company EPC Contractor	Prior to commencement of early works	Early works E&S plans for LNTP
1.5	An operation Environmental and Social Management Plan shall be prepared before commencement of operations.	IFC PS 1; ADB SPS SR1; Policy Principles 1, 2 and 3; EBRD PR 1.	Project Company O&M Company	Prior to Financial Close.	Consolidated Project OESMP Operations phase.
1.6	Appoint key environmental and social roles as agreed with lenders to implement the project E&S commitments in the ESIA. ESMP, ESMS, SEP and LALRPs. Prepare Project E&S/EHS organization chart and allocated roles and responsibilities. f the project and allocate corresponding resources.	IFC PS 1; ADB SPS SR1; EBRD PR 1.	Project Company'	As part of the construction and operational phase ESMS	Appointed E&S personnel and E&S organisational chart. Construction phase monitoring by LESA to determine adequacy of resourcing and need for any additional capacity.
1.7	Develop and implement a Human Resources (HR) and labour management system (HRMS) for construction and operations.	National legislative requirements; IFC PS 2; EBRD PR2; Social Protection Strategy (2001); ADB Gender and Development Policy (1998).	Project Company	Prior to signing .	HRMS in place.
1.8	Develop an training plan per ESMS in line with the ESIA/ESMP capacity need.	IFC PS 1; ADB SPS SR1, EBRD PR 1.	Project Company	As part of the construction and operational phase ESMS	E&S training plans
1.9	Develop a contractor and supplier management plan including reporting requirements and frequency. Lenders' requirements of E&S and H&S shall be cascaded to contractors and suppliers and form part of their contract documents. Ensure that the EPC contractor as sufficient capacity to meet Lender's requirements.	IFC PS1; IFC PS 2; ADB Social Protection Strategy (2001); ADB Gender and Development Policy (1998); EBRD PR 1.	Project Company	As part of the construction and operational phase ESMS	Contractor and supplier management plan

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1.10	Establish an E&S monitoring plan for both the construction and operational phases.	IFC PS 1; ADB SPS, SR1-2 EBRD PR 1.	Project Company	As part of the construction and operational phase ESMS	Construction and operational phase E&S monitoring plan
1.11	Submit an environmental and social (E&S) report to the Lenders on the environmental and social performance of the Project and the status of the implementation of this ESAP.	IFC PS 1; ADB SPS SR1-2; EBRD PR 1.	Project Company	Semi-annually, within 90 days of each 6-month period.	Environmental and social reports (template to be provided by the Lenders) and ESAP progress updates received. Reports and progress against this ESAP satisfactory to the Lenders.
1.12	Lenders environmental and social advisor (LESA) shall be engaged to perform audits, monitoring and reporting to Lenders. LESA shall carry out monitoring on a quarterly basis during construction period and annually post completion of operational completion acceptance.	IFC PS 1; ADB SPS SR1-2; EBRD PR 1.	Project Company	Quarterly during construction. Annually during operation.	LESA environmental and social monitoring reports.
Labour and Working Conditions					
2.1	Develop and implement a Labor and Working Conditions Management Plan (LWCMP) for construction and operations. Communicate HR policy (and supporting procedures) to all employees including contractors and subcontractors, and maintain relevant communication records.	National legislative requirements; IFC PS 2; ADB Social Protection Strategy (2001); ADB Gender and Development Policy (1998); EBRD PR 2.	Project Company EPC Contractor O&M Company	Prior to early works and then on-going. Prior to commissioning and on-going.	LWCMP and HR Policies and associated procedures and templates in English, Uzbek and other languages as necessary, including a template worker contract compliant with the national laws and aligned with Lender requirements. Evidence of implementation. Evidence of dissemination.
2.2	Ensure all project accommodation and welfare facilities (including of EPC, O&M and their subcontractors) meet Lender accommodation and welfare requirements,	IFC PS 2; Social Protection Strategy (2001); ADB Gender and Development Policy (1998); EBRD PR 2.	Project Company EPC Contractor	Prior to financial close	Workers accommodation management plan in place Audit program for worker accommodation Code of Conduct and evidence of dissemination
	Conduct an Independent construction readiness labour audit Conduct quarterly labour audits at each site during construction phase by independent, competent labour experts.	IFC PS 2; EBRD PR 2.	Project Company	Readiness audit- Prior to main construction works or prior to first disbursement, whichever is soonest Quarterly audits thereafter until end of the construction and to clear readiness for operation.	Draft and final quarterly audit reports and corrective actions plans agreed with Lenders and ACWA.
2.3	Implement a formal Project-specific workers' grievance mechanism and disseminate it to all employees including contractors and subcontractors, and maintain relevant communication records and implementation records (i.e. training records, provision of grievance boxes and on-site).	IFC PS 2; Social Protection Strategy (2001); ADB Gender and Development Policy (1998); EBRD PR 2.	Project Company EPC Contractor O&M Company	Prior to early works commencing, then on-going.	Project grievance mechanism meeting Lender requirements for construction and operations. Up-to-date GRM tracker/ grievance log.

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					Evidence of implementation.
2.7	Maintain the Company's Supply Chain Management System (SCMS) to identify, manage and remedy supply chain risks associated with labour exploitation, as well as any other environmental and human rights risks and impacts as specified in the ESMS and Supply Chain management Plan (SCMP).	IFC PS 2; EBRD PR2; Good International Practice; ADB SPS Prohibited Activities Investment List (PIAL), ADB Social Protection Strategy, EU Guidance on Due Diligence for EU Businesses to Address the Risk of Forced Labour in Their Operations and Supply Chains.	Project Company	SCMS implemented during module procurement and manufacture. Update required if there are changes in the PV module supply chain subject to the prior consent of the Lenders.	Evidence of risk assessment conducted by ACWA for both core solar suppliers and EPC /sub-contractors Updated evidence of implementation of supply chain management including in the event of changes in the supply chain. Evidence of an update if there are changes in the PV module supply chain. Updated verified Bill of Material that has been agreed with the Lenders
Resource Efficiency and Pollution Prevention and Control					
3.1	Develop a Water Management Plan for the construction phase, including plans to conserve water.	IFC PS 3; ADB SPS (2009) SR1: Environment, Policy Principle 9a Pollution Prevention, Resource Conservation, and Energy Efficiency; EBRD PR 3.	Project Company EPC Contractor O&M Company	Prior to commencement of construction	Water use assessment supported by a water management plan
3.2	Require that the EPC Contractor and O&M Company to develop pollution management plans with specific provision for early works.	IFC PS 3; ADB SPS (2009) SR1: Environment, Policy Principle 9a Pollution Prevention, Resource Conservation, and Energy Efficiency; EBRD PR 3.	Project Company	Prior to commencement of construction or operation, as applicable	Plans developed and implemented.
3.3	Use a refrigerant whose GWP is below 750 for the BESS.. Assess the NG GHG net offset of the two projects for the complete lifecycle.	EBRD PR3 ADB SPS 9 IFC PS 3; ADB SPS (2009) SR1: Environment, Policy Principle 9a Pollution Prevention, Resource Conservation, and Energy Efficiency; EBRD PR 3; EU F-gas regulation.	Project Company	Methodology: No later than six months following financial close. Reporting: As part of annual reporting to Lenders	Preconstruction: Submission of calculation prior to financial close. Yearly Reporting: As part of the annual reporting. Updated project design to incorporate GHG emission mitigation measures.
Health, Safety and Security					
4.1	Develop an occupational health & safety management system with specific management procedures and plans for the construction and operational phases.	IFC PS 2; ADB SPS (2009) SR1: Environment, Policy Principle 10a Occupational Health and Safety; Social Protection Strategy.	Project Company EPC Contractor O&M Company	As part of the construction and operational phase ESMS	Construction and operational phase occupational health and safety management plan
4.2	Implement specific initiatives to address occupational health and safety risks for female employees when at work. Provide dedicated GBVH training to all workers and contractors as part of Project level Training Plan.	IFC PS 2; Social Protection Strategy (2001); ADB Gender and Development Policy (1998); EBRD PR 2, PR 4.	Project Company	Implementation: ongoing throughout the lifetime of the project	GBVH training and outreach plan
4.3	<i>Gender-Based Violence</i> – Appoint and train GBVH focal points to address GBVH issues , and send immediate notification to Lenders on GBVH complaints.	IFC PS 2; Social Protection Strategy (2001); ADB Gender and Development Policy (1998); EBRD PR 2, PR 4.	Project Company	Within 6 months from signing; Implementation: ongoing throughout the lifetime of the project	GBVH focal points in place, external expert appointed, GBVH complaint notified to the Lenders
4.4	Develop a traffic and transportation management plan for the construction and operation phase.	IFC PS 4; ADB SPS (2009) SR1: Environment, Policy Principle 10.	Project Company EPC Contractor	Prior to transportation of Project equipment	Traffic and transportation management plan

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			O&M Company		
4.5	Develop an influx management plan to mitigate risks on workers and communities nearby.	IFC PS 4; ADB SPS (2009) SR1: Environment, Policy Principle 10b Community Health and Safety.	Project Company EPC Contractor O&M Company	Prior to commencement of construction	Influx management plan
4.6	Develop an Emergency Preparedness and Response plan for the projects.	IFC PS 1; IFC PS 4; ADB SPS, Requirement 1: Environment; ADB SPS (2009) SR1: Environment, Policy Principle 10b Community Health and Safety.	Project Company	As part of the construction and operational phase ESMS	Construction and operational phase EPRPs
4.7	Develop a Security Management Plan for the construction and operational phases.	IFC PS 4; ADB SPS (2009) SR1: Environment, Policy Principle 10.	Project Company	As part of the construction and operational phase ESMS	Security management plan prepared and implemented.
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement					
5.1	Ensure timely implementation of the Land Acquisition and Livelihood Restoration Plan (LALRP) by allocating sufficient resources and involving external experts. Monitoring tools shall be developed.	IFC PS 5; ADB SPS SR2: Involuntary Resettlement, EBRD PR5	Project Company	Livelihood restoration updated plan to be submitted prior to signing or prior to involuntary resettlement impacts, whichever comes first Implementation per the LALRP implementation programme and until confirmed completed by the completion audit. LALRP Committee to established prior to signing Enabling LALRP activities are in place prior to impact	Documented evidence of action completion
5.2	Undertake a quarterly resettlement audit confirming the project is on track with compensation and livelihood restoration implementation.	IFC PS 5; ADB SPS SR2, EBRD PR5	Project Company	One year after initial compensation and support are discharged or prior to project commissioning.	Draft and final reports.
5.3	Appoint a third-party consultant to undertake a LALRP Completion Audit . Implement any further time-bound corrective actions identified in the LALRP completion audit.	IFC PS 5; ADB SPS SR2, EBRD PR5	Project Company	Within two years of completion of the LALRP implementation (including further mitigation measures, if relevant) or after a 5-year period, whichever comes first.	LALRP completion audit conducted by an independent third-party consultant. LALRP completion Audit report, draft and final.
5.4	Develop a Stakeholder Engagement Plan specific to the LALRP to undertake a detailed and appropriately scheduled campaign of meaningful consultation and disclosure of the LALRP to PAPs.	IFC PS 5; ADB SPS SR2, EBRD PR5	Project Company	Prior to signing or prior to involuntary resettlement impacts, whichever comes first	Updated LALRP, including a ToR for the proposed LALRP Committee, and feedback from PAPs incorporated
Biodiversity Conservation and Sustainable Management of Living Natural Resources					
6.1	Develop a full biodiversity offset plan in the Biodiversity Action Plan (BAP) with advice from experts post monitoring period (described in 6.4) sur ensure No Net Loss and Net Get, as required, of key biodiversity identified on site	IFC PS 6; ADB SPS SR1: Environnent, Policy Principle 8; EBRD PR 6.	Project Company	Biodiversity Offset Framework prior to EBRD disclosure/ADB IC	Biodiversity Offset Framework submitted.
6.2	As applicable, carry out pre-clearance/grading relocation of Central Asian	IFC PS 6; ADB SPS SR1: Environnent,	Project Company	Prior to any clearance/grading	Pre-clearance/grading survey and

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	Tortoise during appropriate active periods for the species with a chance find procedure that describes actions to be taken including named locations for tortoises to be kept prior to release.	Policy Principle 8; EBRD PR 6.		commencing.	relocation, with chance find procedure in place
6.3	Develop a Biodiversity Management Plan (BMP) which clearly identifies all mitigation actions to be taken, locations and responsibilities for undertaking each one, and timelines/frequencies of actions. This will include installation of Bird Flight Diverters (BFDs) along the entire length of Project Overhead Transmission Lines (including the 350km-500kv line, the 2x70km OTL lines, and LILOs).	IFC PS 6; ADB SPS SR1: Environnement, Policy Principle 8; EBRD PR 6.	Project Company	Draft BMP at least two months before, and final BMP agreed before, any clearance/grading activities. BFD type agreed with Lenders at least six months before line stringing. Installation of BFDs within two weeks of string transmission lines.	Draft BMP submitted to Lenders. Final BMP agreed with Lenders. Documentation demonstrating implementation of BMP. Specifications and selection of BFDs agreed with Lenders. Timebound plan for installation, and evidence of completion.
6.4	Develop an implementable Biodiversity Monitoring and Evaluation Plan (BMEP) which clearly identifies monitoring actions to be taken, locations and responsibilities for undertaking each action, timelines/frequencies of actions, indicators, and thresholds for adaptive management. This plan will include at least 3 years of Post Construction Fatality Monitoring in line with established good practice and with independent expert oversight, for the full length of project OTLs. It will also include regular winter monitoring to assess any changes in Great Bustard populations/distribution.	IFC PS 6; ADB SPS SR1: Environment, Policy Principle 8; EBRD PR 6.	Project Company	Draft BMEP at least two months before, and final BMEP agreed before, any clearance/grading activities. The PCFM section can come later, if necessary, but at least six months prior to line stringing.	Draft BMEP submitted to Lenders. Final BMEP agreed with Lenders. Documentation demonstrating implementation of BMEP.
8.1	Develop an archaeological chance find procedure and share with EPC Contractor.	IFC PS 8; ADB SPS SR1 ; EBRD PR 8.	Project Company	Timings as with the construction phase ESMS.	Archaeological chance find procedure
8.2	Obtain a permit from the resident Cultural Heritage Office , prior to the start of any construction works within land earmarked for the Project.	IFC PS 8; ADB SPS (2009) SR1: Environnement, Policy Principle 11; EBRD PR 8.	Project Company	Prior to construction commencing	Permit from the resident Cultural Heritage Office
8.3	Liaise regularly with the Cultural Heritage Agency on the progress of the construction work .	IFC PS 8; ADB SPS (2009) SR1: Environnement, Policy Principle 11; EBRD PR 8.	Project Company	Prior to construction commencing	Evidence of direct contact with Government Archaeologist
Information Disclosure and Stakeholder Engagement					
10.1	Implement the Stakeholder Engagement Plan prepared for the Project.	IFC PS 1; ADB SPS, B. Policy Delivery Process, 53, Consultation and Participation; ADB's Access to Information Policy 2018; Environmental Safeguard, Policy Principle 5, 6; EBRD PR 10.	Project Company	Prior to financial close	Updated SEP (annual review thereafter) and records to demonstrate implementation
10.2	Update and maintain the Project external Grievance Mecanism throughout construction and operations.	IFC PS 1; Reference to ADB SPS (2009) SR1: Environmental Policy Principle 5; EBRD PR 10.	Project Company	Update prior to financial close	Enhanced external grievance mechanism, and records of disclosure