

ACWA Power Bash Wind, Uzbekistan

Environmental and Social Action Plan (ESAP) – July 2022

#	PS	Action	Deliverable	Deadline
1	PS 1	<p>The Project Enterprise (PE) will develop and implement an overarching Environmental and Social Management System (ESMS) for the lifecycle of the Project (construction and operations) which shall include:</p> <ul style="list-style-type: none"> (a) Project Specific Environmental and Social (E&S) Policy; (b) Project E&S governance structure supported by a detailed organogram of Project management roles and responsibilities, describing the interfaces between the PE, the Engineering, Procurement and Construction (EPC) Contractor and subcontractors during construction and the Operations and Maintenance (O&M) contractor during operations. (c) An ESMS Handbook or Manual that references all of the E&S management plans and procedures associated with the Project with the respective timeframe and budget for the development and implementation of the management plans (d) Project Specific Environmental and Social Management Plans (ESMPs) (see ESAP#2) <p>The Engineering, Procurement and Construction (EPC) contractor and Operations and Maintenance (O&M) contractor will either develop their own Project E&S policy consistent with ACWA Power and the PE's E&S policy or will adopt the PE's Project-specific Policy.</p>	<ul style="list-style-type: none"> (a) Project-specific E&S Policy (b) E&S Governance Structure (c) ESMS handbook or manual (d) ESMP (refer to ESAP #2) 	(a), (b), (c) and (d) prior to construction and revised and updated 6 months prior to the start of operations.
2	PS 1	<ul style="list-style-type: none"> (a) The EPC contractor shall develop a Construction Environmental and Social Management Plan (CESMP); and (b) The O&M contractor shall develop an Operations Environmental and Social Management Plan (OESMP). (c) The CESMP and OESMP will be supported by the following plans and procedures including: <ul style="list-style-type: none"> i. Contractor Management Plan ii. Working Conditions and Terms of Employment Plan iii. Worker Code of Conduct iv. Supply Chain Management Plan v. Workers Accommodation Plan 	<ul style="list-style-type: none"> (a) EPC contractor CESMP (b) O&M contractor OESMP (c) Individual plans with supporting policies, methods, procedures, checklists for (i) construction and (ii) operations. 	<ul style="list-style-type: none"> (a) and (c) (i) prior to construction (b) and (c) (ii) prior to operations

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		<ul style="list-style-type: none"> vi. Worker Grievance Mechanism vii. Security Management Plan viii. Local Recruitment Plan ix. Environmental Monitoring Plan x. Incident Reporting and Monitoring Procedure xi. Water Management Plan xii. Waste Management Plan xiii. Hazardous Materials Management Plan xiv. Emergency Preparedness and Response Plan xv. Occupational Health and Safety Plan xvi. Community Health and Safety Plan xvii. Traffic and Transport Management Plan xviii. Cultural/ archeological Management Plan (including chance find procedure) xix. Community Grievance Mechanism xx. Gender-based violence and harassment (GBVH) Prevention & Response Plan xxi. Demobilisation plan <p>Bash Project Enterprise and Dzhangkeldy Project Enterprise will work together to mitigate and manage E&S risk of shared assets and potential overlapping risks. Coordination efforts will be documented in the management plans as applicable.</p>		
3	PS 1	<p>The Project Enterprise will obtain the necessary permits prior to commencements of activities for which the permits are required, including to:</p> <ul style="list-style-type: none"> i. Construction Permit(s) ii. Permit(s) for water use/abstraction; iii. No Objection Certificate by the Civil Aviation Authority and Ministry of Defense iv. Permit to transport bulky and heavy cargo v. Registration of Health Protection Zones 	Copies of permits	<p>Prior to start of activities for which the permits are required.</p> <p>(i) – (iii) Prior to construction;</p> <p>(iv) – (v) Prior to operations</p>
4	PS 1	<p>The Environmental and Social Impact Assessment for the Project will be updated and finalized based comments received by MIGA, lenders and other stakeholders and interested parties after the Public Consultation period.</p>	Environmental and Social Impact Assessment	Prior to FC
5	PS 1	(a) The Project Enterprise shall appoint the following E&S personnel:	(a) PE Personnel:	(a) Prior to construction and maintained though operations;

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		<ul style="list-style-type: none"> i. E&S Manager who has overall responsibility for environmental and social management, compliance and implementation of the ESMS; ii. Community Liaison Officer iii. Human Resources Manager <p>The E&S positions shall be retained by the PE throughout Project Construction and Operations.</p> <p>(b) The PE shall require the EPC and O&M contractors to appoint competent E&S personnel for construction based on site. As a minimum this will include: (i) E&S Manager; (ii) Community Liaison Officer; (iii) Human Resources Manager and (iv) archeological supervisor.</p> <p>(c) ACWA Power shall appoint a Biodiversity Manager to oversee development and implementation of biodiversity related measures. During operations, the Biodiversity manager will be supported by a Wind Wildlife Expert.</p>	<ul style="list-style-type: none"> i. Organogram and reporting structure; ii. Job descriptions; iii. Short profiles or curricula vitae; and iv. Signed contracts. <p>(b) For EPC E&S Personnel:</p> <ul style="list-style-type: none"> i. Organogram and reporting structure; ii. Job descriptions; iii. Short profiles or curricula vitae; and Signed contracts. <p>(c) For Biodiversity Manager:</p> <ul style="list-style-type: none"> i. Organogram and reporting structure; ii. Job descriptions; iii. Short profile or curriculum vitae and signed contract 	<ul style="list-style-type: none"> (b) Prior to construction (c) Prior to construction
6	PS 1	<p>The Project Enterprise shall review update and implement the Grievance redress Mechanism (covering workers and communities) for (a) construction and (b) operations to include: (i) contact details of the EPC and O&M contractors; (ii) ACWA Power's zero tolerance policy on any form of reprisal/ retaliation against project stakeholders; (iii) reporting and managing of sexual harassment and gender-based violence; (iv) workers' grievances (v) resettlement and livelihood restoration; (vi) complaints related to security.</p>	<p>Grievance Redress Mechanism for (a) construction and (b) operations</p>	<ul style="list-style-type: none"> (a) Prior to construction and (b) Prior to operations

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7	PS 2	<p>The Project Enterprise shall develop for the a) construction and b) operations phases a set of human resources (HR) policies and procedures in line with the labor laws of the Host Country and MIGA Performance Standard 2 requirements including;</p> <ul style="list-style-type: none"> i. Working conditions and terms of employment procedure; ii. Worker’s code of conduct (covering also the workers accommodation camp and gender based violence); iii. Local recruitment plan; iv. Workers grievance mechanism; v. Workers accomodation plan; 	<ul style="list-style-type: none"> (a) HR policies and procedures for construction. (b) HR policies and procedures for operations. 	<ul style="list-style-type: none"> (a) Final prior to start of construction. (b) Six months prior to the start of operations.
8	PS 2	<p>The PE shall ensure that all employees, including contractor and sub-contractor employees will be provided with a written contract of employment specifying working hours (including provisions for overtime); salary; annual leave; dismissal process; responsibilities of the employee (including responsibilities related to environment, health and safety); responsibilities of the employer and right to join trade unions.</p>	Employment contract template	Prior to the start of construction
9	PS 2	<p>The PE shall commission independent third-party labour audit of the EPC contractor and sub-contractors quarterly during construction.</p>	Labour audit report	Every 3 months during construction
10	PS 2	<p>Workers’ accommodation camp will be designed to meet regulations and the requirements of Workers’ Accommodation: Processes and Standards; A guidance note by IFC and the EBRD, September 2009 and guidance on COVID-19 requirements.</p>	Workers accommodation management plan	Prior to construction
11	PS 2	<ul style="list-style-type: none"> (a) The Project Enterprise shall undertake a gender-based violence and harassment (GBVH) risk assessment for (i) construction phase and (ii) operations, including mapping of GBVH services and response providers to GBVH survivors. (b) Based on the findings of the GBVH risk assessment develop and implement a time-bound GBV prevention and response action plan designed to manage identified GBV risks linked to the Project; (c) The PE and EPC contractor will develop GBVH policy and procedures supported by training and awareness campaigns. (d) The PE and EPC contractor will assign and train a focal point staff to respond to GBVH related incidents. 	<ul style="list-style-type: none"> (a) GBVH risk assessment for (i) construction and (ii) operations phase (b) GBVH action plan with an implementation schedule for (i) construction and (ii) operations phase. (c) GBVH Policy and procedures and training materials for (i) construction and (ii) operations phase; 	<ul style="list-style-type: none"> (a) (i) 6 months prior to the start of construction; (ii) 6 months prior to the start of operations; (b) to (d) Prior to the start of construction; and updated prior to the start of operations.

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			(d) CV of GBVH focal point staff and training plan	
12	PS 2	The PE will undertake a COVID-19 Construction Risk Assessment	COVID-19 construction risk assessment	Prior to the start of construction
13	PS 2	The PE will develop and implement a Supply Chain Management Plan	Supply Chain Management Plan	6 months prior to the start of construction
14	PS 3	(a) The Project Enterprise will undertake a water availability assessment demonstrating sustainable water use prior to any water abstraction. This must demonstrate that that proposed groundwater abstraction does not impact community water availability and ecological systems. The water availability assessment will take into account cumulative impacts from other proposed developments and climate change. (b) Based on the findings of the water availability assessment the Project Enterprise will develop and implement a Water Management Plan to maximise resource efficiency.	(a) Water availability Assessment report (b) Water management plan	(a) Prior to construction (b) Prior to construction
15	PS 3	(a) The Project enterprise shall conduct an assessment of the local waste facilities both for solid, hazardous and wastewater disposal. Only facilities that are appropriately licensed by government regulatory body and operated to acceptable standards of safety for human health and the environment will be considered. (b) Waste Management Plan will be developed and implemented for (i) construction and (ii) operations and will cover appropriate wastewater management / treatment / disposal and management of medical waste (particularly in context of COVID19).	(a) Assessment report of waste facilities and copy of the agreement with the preferred local waste collection and disposal agency (b) Waste management plan for (i) construction and (ii) operations	(a) and (b) (i) prior to construction (b) (ii) prior to operations
16	PS 4	The Project Enterprise shall Prepare an Influx Management Plan, in accordance with IFC Publication, Projects and People: A Handbook for Addressing Project-induced In-migration (2009).	Influx Management Plan	Prior to construction
17	PS 4	Develop a Security Risk Assessment and Security Management Plan with IFC's Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impacts.	Security Risk Assessment and Security Management Plan	Prior to construction
18	PS 5	(a) Review and update the Resettlement Action Plan (RAP) to include: (i) compensation package (following finalization of the Bash-Karakul Overhead transmission line (OHTL) route); (ii) description of the institutional arrangements of the OHTL land acquisition process (including NEGU's responsibility); (iii) arrangement for the provision	(a) Resettlement Action Plan (b) Implementation schedule and RAP	(a) Prior to FC (b) Prior to construction

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		<p>of, and agreement for the provision of alternative land; (iv) valuation calculation and compensation amounts agreed by the project affected persons; (v) feedback received during the disclosure period (in May and June 2022); and (vi) an updated RAP implementation schedule.</p> <p>(b) Implement the RAP. Monitor implementation of the RAP and submit RAP Implementation Compliance Report.</p>	Implementation Compliance Report	
19	PS 5	<p>The Project Enterprise shall:</p> <p>(a) Undertake a Resettlement Completion Audit by an independent third party.</p> <p>(b) If required, develop a Resettlement Corrective Action Plan which includes a timeline, budget and resource allocation based on the findings of the Audit.</p>	<p>(a) Resettlement Completion Audit</p> <p>(b) Resettlement Corrective Action Plan</p>	<p>(a) No later than 24 months following completion of the resettlement process</p> <p>(b) Within 60 days of Resettlement Completion Audit</p>
20	PS 6	The Project Enterprise will implement a Collision Risk Management Plan which involves deploying upfront camera-based shutdown on demand (SDOD) mechanism throughout the wind farm.	Collision Risk Management Plan with agreed SDOD mechanism	Prior to FC
21	PS 6	<p>The Project Enterprise will: (a) contract a qualified ecologist/ raptor consultant / expert to (b) develop and implement a raptor breeding survey protocol based on good practice international raptor monitoring methods and considering the species-specific breeding season(s).</p> <p>(c) Monitoring of ESIA tier 1 (Endangered / Critically Endangered) species will be conducted every year during construction. Coupled with the post-construction fatality monitoring (PCFM: ESAP #23), surveys will be also conducted for the first two years of operation and then every 3 years for the following nine years to confirm the viability of the local population.</p>	<p>(a) Job descriptions; short profiles or curricula vitae; and signed contract.</p> <p>(b) Raptor breeding survey protocol</p> <p>(c) Annual monitoring reports of tier 1 species</p>	<p>(a) 6 months before construction and (b) 2 months before start of construction</p>
22	PS 6	<p>The Project Enterprise will develop and implement a construction phase Biodiversity Management Plan (BMP) that will include preconstruction surveys of habitat quality and habitat features associated with the Critical Habitat species (Southern Even-fingered Gecko and Asian Houbara) and valued environment components; and will recommend any associated avoidance and minimization measures relevant to these species (such as timing of works and translocation of individuals). The construction phase BMP will include:</p> <p>i. A (raptor) Breeding Bird Protection Plan based on results of the ESIA and the breeding raptor survey (ESAP #21) with recommended measures to minimize disturbance to nests during the construction phase and during O&M activities of the operations phase. As part of the Plan, the PE will require the EPC contractor to</p>	<p>Construction phase Biodiversity Management Plan (CBMP) supported by the following plans:</p> <p>i. (Raptor) Breeding Bird Protection plan</p> <p>ii. Reptile relocation plan</p> <p>iii. Bat roosts monitoring protocol</p> <p>iv. Flora conservation action plan</p>	Two months prior to construction

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		<p>avoid construction activities within 750m of nests of ESIA tier 1 bird species in the nest selection period of those species (1st March to 1st July).</p> <p>ii. A Reptile Relocation Plan, which involves hiring a national expert who supervises the relocation plan, the measures and the effectiveness of the proposed measures. The expert will identify potential release sites for the Southern Even-fingered Gecko and Russian Tortoise, assess existing resident populations at these sites, assess the carrying capacity of each potential release site and estimate the number of potential individuals to release, and document releases and a list of indicators to be assessed post release.</p> <p>iii. Monitoring protocol of bat roosts identified during the baseline surveys across all seasons during the construction phase</p> <p>iv. Flora conservation action plan</p>		
23	PS 6	<p>The Project Enterprise will (a) contract a Wind Wildlife expert with international experience, specialized on wind-wildlife to collaborate with the project's locally-contracted ecological consultancy / expert team to finalize the design of the (b) Post construction fatality Monitoring (PCFM) program for both turbines and OHTL and (c) develop an operations phase BMP.</p> <p>As part of the PCFM work stream, the Wind Wildlife Expert will be retained for the first three years of operations to provide technical support to the local consultancy / expert team on PCFM analysis and reporting, training and capacity building. The contract will include two site visits per year (1-month per visit) to conduct independent verification of the PCFM program. The Wind Wildlife Expert will also oversee BMP implementation during this time.</p> <p>The PCFM program will be carried out for an initial minimum 5-year period, but the actual timeframe will depend on fatality results sufficiently demonstrating negligible risks to the satisfaction of MIGA. A single fatality of ESIA tier 1 bird species will trigger review of mitigation measures including Shut down on demand (SDOD).</p> <p>The operations phase BMP will include threshold setting for ESIA tier 1 bird species and bat species following the potential biological removal method, an adaptive management framework and protocols for all on-site operational phase monitoring and mitigation activities including at a minimum:</p>	<p>(a) Job descriptions; short profiles or curricula vitae; and signed contract.</p> <p>(b) Post construction fatality monitoring program;</p> <p>(c) Operations phase Biodiversity Management Plan (OBMP) supported by:</p> <ul style="list-style-type: none"> i. Breeding Bird Protection Plan ii. Livestock management plan iii. PCFM iv. Collision risk management plan SDOD and curtailment plans and protocols 	<p>(a) 6 months prior to the start of operations</p> <p>(b) 3 months prior to the start of operations</p> <p>(c) 3 months prior to the start operations.</p>

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		<ul style="list-style-type: none"> i. Breeding Birds protection plan for operations; ii. Livestock Management plan, iii. PCFM; iv. Collision risk management plan; including Shut down on demand (SDOD) and curtailment plans and protocols as necessary to meet thresholds of ESIA tier 1 bird species. <p>The Operational BMP (including the PCFM program) will be subject to strategic review after a 3-year period and 5-year period.</p>		
24	PS 6	The Project Enterprise will develop and implement a (a) Biodiversity Action Plan (BAP); (b) Biodiversity Monitoring and Evaluation Plan and (c) an offset management plan for critical habitat species. The BAP will include a loss/gain assessment informed by the pre-construction surveys and will identify measures to meet no net loss objectives, and net gain objectives for Critical Habitat species. If offset measures are required, a qualified expert with international experience on offsets will be contracted to develop a Biodiversity Compensation/Offset Plan.	<ul style="list-style-type: none"> (a) Biodiversity Action Plan (BAP) (b) Biodiversity Monitoring and Evaluation Plan (c) Biodiversity Compensation / Offset plan 	<p>Draft version of BAP, BMEP, Offset management plans 2 months before the start of operations.</p> <p>Final version of BAP, BMEP, Offset management 6 months after the start of operations.</p>
25	PS 6	The Project Enterprise will establish a Biodiversity Committee that includes relevant independent international and national stakeholders (e.g., ornithologists) who will oversee the implementation and effectiveness of the mitigation strategy and advise on adaptive management.	<ul style="list-style-type: none"> i. Terms of reference for the Biodiversity Committee ii. List of selected Biodiversity Committee participants iii. Biodiversity Committee contract iv. Minutes of the meeting (MoM) of the first meeting. 	<ul style="list-style-type: none"> i. 8 months prior to operations ii. 6 months prior to operations iii. 3 months prior to operations iv. 2 months prior to operations
26	PS 8	The Project Enterprise shall develop a and implement a Cultural Heritage Management Plan (CHMP) for (a) construction and (b) operations that incorporates mitigation measures identified in the Environmental and Social Impact Assessment. (c) Appoint a dedicated archaeological supervisor to monitor earthworks activities; and (c) Develop and implement a chance find procedure.	<ul style="list-style-type: none"> (a) Construction phase CHMP (b) Operations phase CHMP (c) CV and ToR of archaeological supervisor (d) Chance Find Procedure 	<ul style="list-style-type: none"> a) Prior to construction b) 6 months prior to operations c) Prior to construction d) Prior to construction