

**ENVIRONMENTAL AND SOCIAL ACTION PLAN (ESAP)
100MW SHOKPAR WIND FARM PROJECT, KAZAKHSTAN (2022), DTM 52946**

No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status
PR1 Assessment and Management of Environmental and Social Impacts and Issues							
1.1	Prepare and submit environmental and social monitoring reports that show status of compliance with EBRD PRs and with the requirements of this ESAP.	EBRD reporting requirements.	EBRD PR1.	Shokpar Wind Power Plant LLC; Project Operator after commissioning; Own resources	Every six months during construction, and annually thereafter.	Submission of report to the EBRD. Reports and progress against the ESAP are satisfactory to the EBRD.	
1.2	Create Shokpar Wind Power Plant LLC website. Disclose SEP (see item 10.1 below) and a Non-Technical Summary (NTS) of the Project Disclose sustainability information including biodiversity and impact on nature of the Project Company and cumulative operations in Kazakhstan in line with best practices such as the EU Corporates Sustainability Reporting directive (CSRD) and relevant European Sustainability Reporting Standards) or the International Sustainability Standards Board – Sustainability Disclosure Standards (ISSB) from 2025-6. This will include a sustainability report.	Potential major and moderate E&S risks of the Project are fully examined and addressed. International reporting standards will kick in from 2025 both by ISSB (IFRS Foundation) and EU EFRAG (CSRD)	EBRD PR1.	Shokpar Wind Power Plant LLC; Own resources. Reporting for operations in Kazakhstan in consolidated form in line with international standards from 2025	Q1 2023	Compliance with EBRD PRs. Compliance with international standards	
1.3	Develop, implement and maintain Environmental and Social Management System (ESMS) for the Project.	Ensuring that the necessary provisions are in place to manage environmental, health and safety and labour risks associated with contractors and suppliers of services.	Kazakhstan's legislation. EBRD PR1 and PR2. Best practice.	Shokpar Wind Power Plant LLC and EPC Contractor - Own resources. Project Operator after commissioning	Q2/Q3 2023	Successful ESMS development and implementation throughout Project lifecycle. development, adoption, and implementation of contractor management system	
1.3.1	Develop, implement and maintain Environmental and Social Policy and make it publicly available on the Shokpar Wind Power Plant LLC website.						

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1.3.2	Shokpar Wind Power Plant LLC to appoint: - An E&S Supervision Specialist (engineer) for construction phase to provide oversight of of EPC Contractor and subcontractors - A CLO/Social specialist with international experience						
1.3.3	Develop and implement Contractor Management Plan.						
1.3.4	Develop Construction Environmental and Social Management and Monitoring Plan (C-ESMMP) comprising at a minimum the following sub-plans, procedures and method statements: <ul style="list-style-type: none"> ■ Air quality management plan; ■ Stormwater and erosion control plan; ■ Waste management plan (or amend existing waste management programme); ■ Wastewater management plan; ■ Noise management plan; ■ Hazardous materials storage and management plan; ■ Community health and safety plan; ■ Supply chain management plan and Supplier risk assessment for all contractors and suppliers ■ Labour management plan; ■ Retrenchment policy; ■ Human resources (HR) policy; ■ COVID precautionary measures/procedures; ■ Traffic and residents safety management plan; ■ Emergency preparedness and response plan; ■ Workers occupational health and safety management plan; ■ Worker code of conduct ■ Stakeholder engagement plan (SEP) for construction phase; and ■ Facility commissioning plan. ■ Refuelling and spill prevention and clean-up; 	<ul style="list-style-type: none"> - Construction activities on-site without programmes to avoid or minimize impacts on human and environmental resources. - Unsafe vehicles, accidents. - Damage to protected flora. - Contractors E&S performance not managed. - Noise disturbances to communities. - Community disruption, violence, crime, disease due to worker influx. 	EBRD PR1 – PR10. Good international construction practices.	EPC Contractor to develop and Shokpar Wind Power Plant LLC to approve. E&S Supervision Specialist to oversee HSE Performance.	progress with implementation prior to commitment of funds Implementing throughout construction.	C-ESMMP approved by EBRD and other Lenders. Comprehensive contractor programme to avoid/minimise impacts. Subcontractor compliance with plans. All activities in accordance with C-ESMMP.	

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	<ul style="list-style-type: none"> ■ Cement truck washing; and ■ Archaeological chance find procedure. 						
1.3.5	<p>Ensure Operation Environmental and Social Management and Monitoring Plan (O-ESMMP) is in place comprising:</p> <ul style="list-style-type: none"> ■ SEP update for operations; ■ Biodiversity management plan incl. bird mortality monitoring procedure; ■ Biodiversity management and monitoring plan; ■ Waste management plan; ■ Occupational health & safety plan; and ■ Hazardous materials storage and management plan. 	<ul style="list-style-type: none"> - Operational activities on-site without programmes to avoid or minimize impacts on human and environmental resources. - Inadequate waste management practices. - Inadequate communication with stakeholders and public. 	<p>EBRD PR1 – PR10.</p> <p>Best practice.</p>	Project Operator	<p>Prior to commissioning the Project.</p> <p>Implementing throughout operation & maintenance.</p>	<p>O-ESMMP approved by EBRD and other Lenders.</p> <p>Comprehensive E&S management program in place.</p> <p>No unacceptable or unpredictable impacts.</p>	
1.4	<p>In consultation with Zhanatas District council (Akimat) develop and implement a Corporate Social Responsibility Program (CSR) for Shokpar Project (in similar fashion, as Zhanatas WPP Project did).</p>	<ul style="list-style-type: none"> - Direct support/benefits to local communities 	<p>Best practice</p> <p>Voluntary</p>	Project Investors	<p>Develop prior to commissioning</p> <p>Implement – throughout operation</p>	<p>CSR) agreed with Project stakeholders and fully implemented</p>	
PR2 Labour and Working Conditions							
2.1	<p>Company to develop HR management system and procedures appropriate for the project governance structure to cover directly employed staff and personnel recruited for the project under the contracts with outsourced organisations (contractors) to ensure compliance with national labour law and EBRD PR2,, including specifically provisions covering the terms of employment and dismissal, freedom of association/collective bargaining, proscription of forced and child labour, retrenchments, mandatory medical checks for new hires, social leave/benefits, etc. Update system/policies as necessary to ensure compliance.</p> <p>Develop and implement a grievance procedure for all workers, including</p>	<p>Company's HR policies in accordance with PR2.</p> <p>Effective resolution of internal grievances.</p>	<p>EBRD PR2</p> <p>Best practice</p>	<p>Shokpar Wind Power Plant LLC own resources or external consultant.</p>	<p>After signing the loan agreement but before the start of operations phase.</p>	<p>HR policy and procedures developed in accordance with PR2 in place and available to direct workers and contractor employees. Contractors' policies and procedures inspected and approved by Lenders or third party acceptable to Lenders.</p> <p>Adoption and implementation of employee grievance procedure.</p>	

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	contractor employees and include in formal HR policy.						
2.2	<p>Supply chain risks Company to develop and implement a robust supply chain management system to identify, manage and remediate supply chain risks associated with labour exploitation, as well as any other significant environmental and human rights risks and impacts. The management system should provide for supply chain traceability and labour audits and third party verification commensurate with the labour risks identified.</p> <p>Project specific Supply Chain Management Plan shall be developed to cover key risks associated with its suppliers during construction and operations, including due diligence and management procedures for the sourcing of wind towers, blades, nacelles in accordance with the <i>EU Guidance on Due Diligence for EU Businesses to Address the Risk of Forced Labour in Their Operations and Supply Chains (2021)</i>, as well as relevant EBRD policy or guidelines from time to time adopted by EBRD.</p> <p>With respect to wind towers supply chains, the management system will require:</p> <ul style="list-style-type: none"> ■ Responsible Sourcing Policy; ■ Mapping and risk assessment; ■ Specific defined measures to be implemented in case the mapping reveal potential exposure to forced labour; ■ Inclusion of appropriate clauses in procurement notices and contracts with wind turbine manufacturer and its 	<p>Full understanding of social and environmental risks material for the project associated with Company's supply chain.</p> <p>Effective prevention of such risks.</p>	<p>Good International Practices. EBRD PR2. EU Guidance on Due Diligence for EU Businesses to Address the Risk of Forced Labour in Their Operations and Supply Chains.</p>	<p>Shokpar Wind Power Plant LLC own resources or external consultant.</p>	<p>Ongoing implementation.</p> <p>Legal clauses to be added into Operations Contract during next contract update/extension if immediate update is not possible.</p>	<p>Evidence of implementation of supply chain management system (due diligence reports, risk assessment, contract clauses, labour audits reports, etc.).</p>	

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	<p>subcontractors/suppliers on labour risks and management thereof;</p> <ul style="list-style-type: none"> ■ Self-declarations, codes of conduct or similar, by wind turbine manufacturer and suppliers regarding labour risks; ■ When possible, requirements for wind turbine supplier to conduct (or provide) deep traceability audits of their supply chains; and ■ Requirements for chain-of-custody certification from suppliers. ■ Conduct periodic labour assessment, monitoring and implementation of SCMS through audits and reporting on its suppliers. ■ Keep track on implementation of the Corrective Actions Plan (CAP) developed after each labour inspection and audit on project site in Kazakhstan, on assembly and production facilities of the core Supplier (Tier 1) and contentious risk screening of core suppliers (Tier 2) in the country of origin. ■ Include dis-engagement clauses to the agreements with LTSA their suppliers in case of material non-compliance with key provisions listed in the responsible supplier policy. In case of failure to comply with the supplier policy requirements, then disengagement ■ LTSA to provide immediate notifications to the Company and the Lenders if/when forced/child labour risks or allegations are raised in relation to its core suppliers 						
2.3	Encourage contractors to hire local workers.	Good employment practices in local community.	EBRD PR 2 Best practice.	LTSA Contractor.	Prior to engaging contractors.	Meaningful local hiring, including semi-skilled and skilled workers.	

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PR3 Resource Efficiency and Pollution Prevention and Control							
3.1	<p>Ensure Construction Environmental and Social Management and Monitoring Plan (C-ESMMP) (see details in Action 1.3.4 above) is fully implemented. Implement measures to prevent / reduce / control impacts to groundwater and surface water as a result of spills of fuel, lubricants and other chemicals.</p> <ul style="list-style-type: none"> ■ Store fuels and oils in bunded containers with 110% capacity. ■ Ensure drip-trays are in place where fuels or oils are stored or used. ■ Identify a designated bunded refuelling location ■ Train drivers and equipment operators in proper fuel management. <p>Be prepared for clean-up of small spills (fuel, etc.), including (but not limited to):</p> <ul style="list-style-type: none"> ■ Spill control measures provided in all vehicles and equipment and at all sites at all times. ■ Training in clean-up for drivers and equipment operators, and others who use fuel, oil, other hazardous materials. 	<ul style="list-style-type: none"> - Hazardous materials spills. - Air pollution - Soil and groundwater contamination <p>With implementation of C-ESMMP the E&S risks associated with construction activities and then during operation will be significantly reduced or completely avoided</p>	Kazakhstan's legislation. EBRD PR3. Best practice.	EPC contractor - Own resources or external consultant. Shokpar Wind Power Plant LLC to approve.	to progress with implementation prior to commitment of funds. Implementing throughout construction.	C-ESMMP fully implemented. Mitigated adverse impacts on air, local soils and groundwater. All spills cleaned up promptly. Include in ESHS report to EBRD information on spills and clean-up.	
3.2	Ensure Operation Environmental and Social Management and Monitoring Plan (O-ESMMP) (see details in Action 1.3.5. above) are fully implemented.	<ul style="list-style-type: none"> - Damage to protected flora and fauna. - Hazardous materials spills. 	Kazakhstan's legislation. EBRD PR3. Best practice.	Project Operator	Prior to commissioning the Project and onwards thereafter.	O-ESMMP fully implemented. Waste is properly managed and disposed of. Mitigated adverse impacts on local soils, flora and fauna. All spills cleaned up promptly.	
3.3	Develop a Decommissioning and Restoration Plan.	Waste minimisation and reduction in incidents / accidents.	EBRD PR3. Best practice.	Project Operator and/or construction companies.	Plan developed prior to decommissioning. Plan implemented during decommissioning.	Plan made available and implemented.	

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PR4 Health and Safety							
4.1	<p>Undertake a time modelling simulation for shadow flicker of WTG EN-10, which is located within 1,200 meters from the nearest houses of Zhanaryyk village. Flicker effects have been proven to occur only within ten rotor diameters of a turbine. Therefore if the turbine has 156 m diameter blades, the potential shadow flicker effect could be felt up to 1,560m from a turbine.</p> <p>In addition, community engagement should be undertaken to ensure that communities are aware of the grievance mechanism process available.</p>	<ul style="list-style-type: none"> - To ensure safety of Zhanaryyk community 	EBRD PR4	Project Operator	To monitor during first three years of operations	<ul style="list-style-type: none"> • No shadow flicker disturbance, or appropriate mitigation/compensation in place • ESHS reporting: Report shadow flicker complaints and actions taken 	
4.2	<p>Undertake a Preliminary Noise Impact Assessment (modelling) to determine whether more detailed investigation is warranted. If the assessment results in 35dB(A) magnitudes of ambient noise levels at all wind speeds during day and night time, then it is required to undertake a more detailed noise modelling, including development of mitigation measures (e.g. turbine siting, noise barriers around affected houses; stopping turbine operation above a certain wind speed and some others). Monitoring during operation stage of the noise level.</p>	<ul style="list-style-type: none"> - To ensure safety of Zhanaryyk community 	EBRD PR4	Project Operator	To monitor during first three years of operations	<ul style="list-style-type: none"> • No disturbance to communities as a result of excessive noise from the wind park 	
4.3	<p>Implement an occupational health and safety (OHS) plan to guide all activities on the Project site during construction and then operation & maintenance.</p>	<ul style="list-style-type: none"> - Noncompliance with employment and safety laws. - Failure to implement mitigations required for E&S protection. - Unacceptable risks to workers. 	Kazakhstan's legislation. EBRD PR 4. Best practice.	<p>EPC Contractor; Shokpar Wind Power Plant LLC to approve.</p> <p>Project Operator.</p>	<p>During construction (implementation as per the EPC Contractor).</p> <p>Operating period OHS plan to be implemented before COD.</p>	<p>Submission of OHS plans. Effective OHS system in place. Zero accidents for construction and operational period.</p>	

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4.4	<p>Provide safe working conditions on-site during construction including requirements to use PPE (head, hand, eyes and foot protection) by all workers involved in construction, operation and/or maintenance.</p> <p>Provide adequate worker accommodation in compliance with national requirements and EBRD/IFC guidance on worker accommodation.</p> <p>Conduct regular inspections of working conditions on site to ensure that HSSE risks are identified and addressed timely.</p>	<ul style="list-style-type: none"> - Noncompliance with employment and safety laws. - Failure to implement mitigations required for E&S protection. - Unacceptable risks to workers. 	<p>Kazakhstan's legislation. EBRD PR 4. Best practice.</p>	<p>EPC Contractor. Project operator.</p>	<p>Throughout construction and operation & maintenance.</p>	<p>Zero accidents for construction and operational period.</p>	
4.5	<p>Develop and implement or require contractors to develop and implement procedures to protect public health and safety, to include (but not be limited to):</p> <ul style="list-style-type: none"> ■ Traffic management plan for all drivers and equipment operators, including Traffic Management Plan for WTGs sections' transportation along national, regional and local road leading to the project site (see 1.3.4 above); ■ Emergency preparedness plan (see 1.3.4 above); ■ Public notice of construction operations near areas open to the public; ■ Security as needed to prevent unauthorized access to project locations, with appropriate training for guards; and ■ Hazard notices/signs/barriers to discourage/prevent access to energized components or other dangerous areas. ■ Monitor ice build-up on the wind turbines and consider anti-icing measures. 	<ul style="list-style-type: none"> - Noncompliance with national safety laws. - Failure to implement mitigations required for E&S protection. - Unacceptable risks to local residents, pedestrians and drivers. 	<p>EBRD PR4. Good international construction practices.</p>	<p>EPC Contractor. Shokpar Wind Power Plant LLC to approve.</p>	<p>Throughout construction.</p>	<ul style="list-style-type: none"> - Traffic management plan for construction stage in place and implemented. - Include HSE performance in reporting to EBRD. 	

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PR10 Information Disclosure and Stakeholder Engagement							
10.1	<p>Adopt and implement Stakeholder Engagement Plan (SEP) for the Project and update it regularly depending on the project implementation phase.</p> <p>Appoint internal resource for local community engagement and grievance management.</p> <p>Regularly (once per three months) review the effectiveness of the external grievance mechanism.</p>	<p>Appropriate stakeholder engagement and Project information disclosure.</p> <p>Constructive relationship with Project stakeholders.</p>	<p>EBRD PR10. Best practice.</p>	<p>Shokpar Wind Power Plant LLC and EPC Contractor. SEP was developed by external consultant.</p>	<p>Prior to Board consideration. Throughout the life of the Project.</p>	<p>Stakeholders informed and engaged as defined in SEP.</p> <p>Grievance mechanism for external stakeholders in place and operational.</p> <p>Stakeholders aware of Community Liaison Officer (if appointed).</p> <p>Annual reports to EBRD.</p>	
10.2	<p>As part of SEP implementation, communicate with local public residents living nearby the Project site in advance of construction activities to inform them of the duration, type and degree of disturbances.</p> <p>Finalise development of project specific website and publicise project updates through various communication channels.</p>			<p>EPC Contractor (construction stage).</p> <p>Project Operator (operation stage).</p>	<p>Throughout construction, operation and maintenance.</p>	<p>SEP implemented and maintained.</p> <p>Zero accidents associated with public health & safety.</p> <p>Keeping grievance records and resolution status and report to the lenders.</p>	