

ENVIRONMENTAL AND SOCIAL ACTION PLAN CRUCEA NORTH WIND POWER PLANT

Draft for public comment

September 2013

ENVIRONMENTAL AND SOCIAL ACTION PLAN

Crucea North Wind Power Plant, Romania

The European Bank for Reconstruction and Development (EBRD), Eksport Kredit Fonden (EKF) and Erste Group Bank AG (Erste) or together the “Banks” are considering providing financing to Crucea Wind Farm S.A (“CWF,” or the “Client”). to support design, construction, and operation of a 99-megawatt wind power plant in Constanța County, Romania. The project is known as “Crucea North Wind Farm 99 MW (extension to 108 MW as option)” and will be owned and operated by CWF., whose majority owner in turn is STEAG GmbH (the “Sponsor”). The project will include 33 (after extension, 36) wind turbine generators, a new on-site substation, a new transformer station Stupina 2, six kilometers of new access roads, and upgrades of about 45 kilometers of existing roads.

As required by Romanian law, CWF evaluated the project’s potential impacts in an Environmental Impact Assessment and has been issued relevant construction permits for the project. Before and during construction, and then throughout operation of the project, CWF will need to implement a series of actions to avoid, reduce, or otherwise control potentially significant environmental and social impacts identified in the EIA and as part of environmental and social due diligence required by the Banks. These actions are summarized in this Environmental and Social Action Plan (ESAP). The ESAP will be part of the financing agreement between CWF and the Banks. The performance of the required actions will be reported to EBRD, Erste and EKF at least annually by CWF and will be audited or otherwise evaluated by EBRD, Erste and EKF throughout construction and operation of the project.

The table below constitutes the ESAP¹. It identifies the required actions, the basis of the requirements, the timing when the actions have to be implemented and/or completed, the criteria to be used for determining whether the required action has been successfully achieved, and the information that is to be reported to the Banks. Implementation of all the actions is the responsibility of CWF. When other companies perform work under contract, CWF will be responsible for their compliance with the requirements of the ESAP, even if direct oversight is by another first-tier contractor. This is expected to be accomplished by inclusion of requirements in contracts and subcontracts, and by direct oversight and supervision by CWF and/or its oversight contractor as needed.

As agreed by EBRD, Erste, EKF and CWF, this ESAP may be revised from time to time during project performance. No changes will allow violations of Romanian law or of EBRD, Erste and EKF requirements for environmental and social performance.

¹ For purposes of this ESAP, “construction” includes all actions in the field to prepare and construct the various components of the wind power plant, including turbines, roads, transmission lines, and the project substation. “Operation” means operation and maintenance of all facilities for the ultimate purpose of generating and conveying electricity. “Project performance” includes the entire period of construction, operation, and decommissioning.

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No.	Action	Source of requirement	Date required	Target and Evaluation Criteria and Reporting Requirements ²
0	Submit report to the Bank on environmental, social, health and safety performance, including status of each ESAP element and compliance with relevant Performance Requirements	EBRD, Erste, EKF	- Prior to commercial operation - Annually during operation	Submission of reports on schedule and in a mutually agreed format.
1	PR 1: Environmental and social appraisal and management			
1.1	Develop and implement integrated environmental, social, and occupational health and safety management system(s) equivalent to those under ISO 9000, ISO 14001, and OHSAS 18001. <i>Note: certification is not required.</i>	Best practice EBRD PR 1 IFC PS 1	- Develop systems prior to relevant stages of construction and operation - Implement throughout relevant stage	- Systems developed by qualified consultant, staff trained, systems implemented. - Status of systems development, adoption, and implementation described in each report to EBRD, Erste and EKF
1.2	Design a framework for defining the organisational structure of the project, with all key roles represented in an organogram. Appoint and maintain person(s) to be responsible for environmental and social compliance, and for occupational health and safety, to report directly to the project manager, and subsequently to CWF management.	Best practice EBRD PR 1 IFC PS 1	- Framework defined: within 30 days of financial close - Person(s) appointed and maintained: throughout construction and operation	- Project organization defined - Organogram provided to EBRD, Erste and EKF - Appointment of qualified official - Qualifications submitted to EBRD, Erste and EKF with first report - Responsible person maintained at all times

² Items required to be reported to the Banks will be presented in the reports required under item 0, unless noted otherwise.

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<i>No.</i>	<i>Action</i>	<i>Source of requirement</i>	<i>Date required</i>	<i>Target and Evaluation Criteria and Reporting Requirements²</i>
1.3	Establish and implement project-level policy and procedures to manage ESHS planning and performance of construction and other contractors, including at a minimum: <ul style="list-style-type: none"> - Inclusion of appropriate ESAP and other legal requirements in contracts/subcontracts - Assignment of clear responsibilities within STEAG and contractor ESHS responsibilities - Regular inspections of contractors' construction camp and construction operations. - Contractor reports sufficient to allow CWF to include data in reports to the EBRD, Erste and EKF, and to allow evaluation of need for corrective actions. - Verification of training and/or professional credentials for contractor staff/managers responsible for ESHS. 	Best practice EBRD PR 1 IFC PS 1	<ul style="list-style-type: none"> - Develop/adopt: prior to executing contracts/subcontracts - Implement: throughout execution of contracts/subcontracts 	<ul style="list-style-type: none"> - Include in ESHS reports to EBRD, Erste and EKF: - Program description and adoption status - Highlights of performance (appointments, inspections, etc.) - Training - Summaries of project and contractor environmental and OHS performance
1.4	Acquire and comply with all required permits and authorizations	Romanian law EBRD PR 1 IFC PS 1	<ul style="list-style-type: none"> - Acquire: prior to beginning any activities that require permits or authorizations - Comply: throughout activities that are permitted or authorized 	<ul style="list-style-type: none"> - All permits and authorizations received - Reports submitted to authorities as required - Compliance status reported to EBRD, Erste and EKF
1.5	Implement the ESMP	EBRD PRs IFC PS 1	As required by ESMP	<ul style="list-style-type: none"> - Report to EBRD, Erste and EKF on highlights of implementation
1.6	Provide information and support as needed for EBRD audit of key ESHS issues as outlined in this ESAP, ESMP,	EBRD PR 1 Best practice	<ul style="list-style-type: none"> - Within one year of commissioning 	<ul style="list-style-type: none"> - Information and support provided to complete audit

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	and permits.	IFC PS 1	-	<ul style="list-style-type: none"> - Address EBRD, Erste and EKF recommendations - Agree with EBRD, Erste and EKF on further monitoring, if needed
1.7	Develop and maintain a register/log of all permits and consents required and obtained/transferred, including permit conditions and tracking of close-out of permit conditions.	EBRD PR1 Romanian Law IFC PS 1	Continuously throughout construction and operations	<ul style="list-style-type: none"> - Establishment and maintenance of permit register - Report to EBRD, Erste and EKF confirming compliance with permit conditions before start of construction and before start of operation. - Report to EBRD, Erste and EKF when all conditions are met for start of construction and for commencement of commercial operation

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No.	Action	Source of requirement	Date required	Target and Evaluation Criteria and Reporting Requirements ²
2	PR 2: Labor and working conditions			
2.1	<p>Develop and implement an occupational health and safety (OHS) plan to guide all activities on project site(s) during site preparation, construction, and operation. Also require contractor plans/compliance. Requirements to include (but not be limited to):</p> <ul style="list-style-type: none"> - Job- and task-specific hazard analysis and controls for all activities - Provision of PPE, requirements for use of PPE, and enforcement of PPE use - Safety training for all personnel in their language, covering hazards and safety protocols of their jobs - Review and approval of contractors' OHS plans, which must meet same standards as CWF plan - Oversight of contractor OHS implementation, including mandatory reporting - Recording incident statistics, including total work hours, lost time incidents, major injuries/fatalities, etc. 	<p>Best practice EBRD PR 2 IFC PS 2</p>	<ul style="list-style-type: none"> - CWF (or lead contractor) plan: develop prior to construction and prior to operation, implement throughout activities - Contractor plan: develop prior to contractor activities on-site, implement throughout activities 	<ul style="list-style-type: none"> - Submission and approval of CWF plan by independent OHS professional - Submission of contractor OHS plan(s) and approval by CWF (or oversight contractor) - Report to EBRD, Erste and EKF on OHS issues, including incident statistics and status of training (to cover STEAG and contractor workforces) - Report to EBRD, Erste and EKF immediately in case of major accidents and/or fatalities
2.2	<p>Develop HR policy and procedures to include the main aspects related to employment, unemployment, working conditions and HR-related aspects, which are considered important by the company and which will also be applied to all sub-contractors when working for this project.</p>	<p>EBRD PR 2 Romania law IFC PS 2</p>	<p>Within 3 months of financial close</p>	<ul style="list-style-type: none"> - HR policy and procedures are in place - Contractors' policies and procedures inspected and approved - Report status of policy development/adoption to EBRD,

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				Erste and EKF
2.3	Support local labor force by: - Providing realistic information on employment opportunities, with transparent hiring practices - Advertise for all open positions - Employing local workers where possible: establish and meet goals for local hires, consider training for permanent positions - Paying wages at least average for the area for comparable positions	Romanian Law EBRD PR 2 Best practice IFC PS 2	Throughout construction and operation, prior to filling open positions	- Local announcements when hiring - Training for local workers - Wages comparable to regional averages
2.3	Develop and implement a grievance procedure for employees, including contractor employees. Include in formal HR policy (item 2.1). <i>Note: this is a separate mechanism than the one for external stakeholders that is part of the Stakeholder Engagement Plan under PR10.</i>	EBRD PR 2 IFC PS 2	Develop and implement prior to construction and throughout project performance	- Submission to EBRD, Erste and EKF (with first report under item 0) of grievance procedure for review and approval - Thereafter, reports to EBRD, Erste and EKF to include summary of worker grievances and resolutions
3	PR 3: Pollution prevention and abatement			
3.1	Identify and implement construction phase noise and vibration controls. Apply construction speed limits, especially near residences, maintain equipment and vehicles, and where possible, limit work to daylight hours, minimize weekend work.	Romanian law EBRD PR 3 IFC PS 3	Implement construction noise and vibration controls: throughout construction	- Minimal noise disturbance - Report to EBRD, Erste and EKF any noise complaints and actions taken
3.2	Monitor noise at residences upon request, take actions	EBRD PR 3	Monitor as requested,	- Minimal noise disturbance

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	to reduce or control noise from turbines and/or substation as needed to meet applicable standards and reduce nuisance levels.	Best Practice IFC PS 3	control/reduce as needed	- Report to EBRD, Erste and EKF any noise complaints and monitoring results
3.3	Identify and implement best practices to control dust generation, including sheeting dusty loads, damping roads in dry conditions, preventing mud/dirt deposition on public roads, speed controls, etc.	EBRD PR 3 Romanian law Best practice IFC PS 3	- Define procedures and train drivers/workers: as needed for workers' tasks - Implement: throughout construction when suppression is needed	Minimal occurrence of dust nuisance
3.4	Define and implement a landscape management plan for project infrastructure, to include vegetation screening of substation, storage and re-use of topsoil, and restoration/revegetation of all disturbed ground as soon as construction activities are completed. Use native species for seeding/replanting.	EBRD PR 3 Best practice IFC PS 3	Land restoration/revegetation: prior to commissioning	- Topsoil salvaged, stored, reused - Native species replanted/reseeded - Self-sustaining plant cover of native species established and maintained - Report to EBRD, Erste and EKF highlights of program
3.5	Develop and implement waste management plans for construction and operation phases, to cover all liquid and solid construction and operation wastes (chemicals, construction debris, excess spoil, domestic/household wastes, spill cleanup debris, domestic waste, etc.). Maximize waste reduction, reuse, recycling, Ensure all off-site management is by licensed companies and in licensed places	Romanian Law EBRD PRs1, 3 Best practice IFC PS 3	- Develop: prior to waste management - Implement: throughout project performance	Development: - Review and/or approval of plan by authorities, if required - Require compliance in all contracts - Report to EBRD, Erste and EKF on status of plan and approval Implementation: - All wastes managed in accordance with approved plan

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				<ul style="list-style-type: none"> - Reports to authorities as required in permits - Reports to CWF by all contractors on amounts, types, and management of all solid wastes - Reports to EBRD, Erste and EKF on status of plan implementation - Immediate report to EBRD, Erste and EKF and relevant authorities of significant incidents and response actions

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4	Community health, safety, and security			
4.1	Develop and implement – and require contractors to implement -- procedures (formal and/or informal, as appropriate) to protect public health and safety, to include (but not be limited to): <ul style="list-style-type: none"> - Traffic management plan for all drivers and equipment operators (speed limits, training, routes to follow, avoidance of sensitive areas, etc.) - Public notice/signage of construction operations near areas open to the public - Security as needed to prevent unauthorized access to project locations, with appropriate training for guards - Notice to local authorities and nearby residents before major activities and traffic - Hazard notices/signs/barriers to prevent access to energized components and other dangerous areas - Best effort to minimize disruption and closures of public roads 	EBRD PR 4 Best practice IFC PS 4	<ul style="list-style-type: none"> - Develop procedures: prior to commencement of major works - Implement: throughout construction 	<ul style="list-style-type: none"> - Consultations with local authorities on traffic, notices, etc. - Consultations with traffic authorities on traffic plan - Submission of plans to EBRD with first report under item 0 - Report to EBRD, Erste and EKF on traffic management, security, other activities, including any incidents/ accidents involving the public
4.2	Establish and enforce rules for worker behavior when dealing with local residents and visitors in order to prevent adverse impacts	EBRD PR 4 Best practice IFC PS 4	Throughout life of work camps and employment of non-resident workers	<ul style="list-style-type: none"> - No serious incidents between workers and local population - Consultation with local authorities concerning appropriate behaviors and controls - Report to EBRD, Erste and EKF on all incidents

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4.3	Minimize the amount of work done after daylight hours wherever possible, particularly work that can cause noise or require bright lights	EBRD PRs 3, 4 Best practice	- Throughout construction	Notice to local authorities when work is to take place after hours
5	PR 5: Land acquisition, involuntary resettlement and economic displacement			
5.1	Provide replacement or compensate at fair market value any person who suffers any economic losses caused by project activities and/or the use of land by the project, including loss of use of communal land (whether use was authorized or not), damage to crops, injury or death to animals, loss of access to fields, etc.	Romanian law EBRD PR 5 IFC PS 5	Prior to economic loss, unless for compensation for damages	- All replacement and compensation at fair market value - Report to EBRD, Erste and EKF summary of economic losses due to project and compensation or replacement paid
6	PR 6: Biodiversity conservation and sustainable management of living natural resources			
6.1	Develop and implement program of bat and bird monitoring during spring and fall migration seasons as well as breeding and resident seasons (primarily spring and summer). Focus should be on large birds (raptors, wading birds, large waterfowl) and birds that exhibit aerial courtship display. Data must be sufficient to verify or refine understanding of baseline conditions and collision risk, and then identify any changes or significant variation from earlier findings.	EBRD PR 6 Best practice IFC PS 6	- Develop: within 60 days of financial close - Implement: During construction and at least first two years of operation, thereafter as recommended under 6.3	- Review and approval of plan by independent expert, review (if possible) by Romanian Ornithological Society - Report to EBRD, Erste and EKF on the status of monitoring program

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6.2	Develop and implement program of bat and bird mortality monitoring at all turbines and at wind mast, with emphasis on migration and breeding seasons	EBRD PR 6 IFC PS 6	- Wind mast: construction and operation - Turbines: throughout operation	- Review and approval of plan by independent expert, review (if possible) by Romanian Ornithological Society - Report summary of monitoring results, including unusually high mortality
6.3	Appoint independent expert(s) to conduct annual evaluation of bird and bat seasonal monitoring (item 6.1) and mortality monitoring (6.2) programs and results in order to evaluate impacts on birds and bats and, if needed, to recommend changes to operating parameters (such as rotation speed or operating hours during sensitive periods/hours). After year 2, and annually thereafter if applicable, expert to make annual recommendation on continuation/modification of monitoring under 6.1 (after year 4 for 6.2 monitoring).	EBRD PR 6 Best practice IFC PS 6	- Appoint expert: prior to operations - Expert reviews/reports: before operations commence and thereafter after each annual monitoring report under 6.1 and 6.2.	- Expert CV approved to EBRD, Erste and EKF - Evaluation report from expert, implementation of recommended changes (if needed) - Submission of expert's report to EBRD, Erste and EKF, including any proposed changes to operating parameters
8	PR 8: Cultural heritage			
8.1.	Develop and implement chance finds procedure, including worker and supervisor training	Romanian law EBRD PR 8 IFC PS 8	- Procedure implemented throughout construction	- Procedure developed and implemented - Report chance finds to relevant authorities - Report to EBRD, Erste and EKF on status of procedure and on chance finds

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10	PR10: Stakeholder engagement			
10.1	Implement Stakeholder Engagement Plan, including stakeholder grievance mechanism and notice to authorities and residents of major construction events (see item 4.1)	EBRD PR 10 Best practice IFC PS 1	Throughout construction and operation	<ul style="list-style-type: none"> - Report to EBRD, Erste and EKF on consultation activities, including notices given - Report to EBRD, Erste and EKF summary of grievances received and how addressed/ resolved
10.2.	Report on a regular basis to the impacted communities about project progress status, and progress in the implementation of this ESAP	EBRD PR 10 Best Practice IFC PS 1	Semi-annually during construction and annually during operation	<ul style="list-style-type: none"> - Report to EBRD, Erste and EKF on consultation activities - Report to communities on status