

ENVIRONMENTAL AND SOCIAL ACTION PLAN CHIRNOGENI WIND FARM PROJECT

Draft for public comment

August 2011

ENVIRONMENTAL AND SOCIAL ACTION PLAN

Chirnogeni Wind Farm Project, Romania

The European Bank for Reconstruction and Development (“EBRD,” or the “Bank”) is considering providing financing to EP Global Energy (“EPGE”) to support design, construction, and operation of an 80-megawatt wind farm near Chirnogeni village in Constanța County, Romania. The project is known as the Chirnogeni Wind Farm Project and will be owned and operated by EP Wind Project (ROM) Six SRL. The project includes the wind farm and a new transmission line that will connect the turbines to an existing substation near Chirnogeni, and rehabilitation by a third party (ENEL) of 45 kilometers of an existing 110kV transmission line that runs from Chirnogeni through Cobadin to Basarabi.

EPGE has prepared and disclosed two Environmental and Social Impact Assessments (ESIAs), one for construction and operation of the wind farm and one for rehabilitation of the transmission line and the three existing substation (Chirnogeni, Cobadin, Basarabi). These ESIAs describe the project and the natural and human resources that could be affected, and evaluates the potential impacts the project could have on those resources. Both ESIAs generally meet the requirements of Romanian law and of the Bank’s 2008 Environmental and Social Policy and associated Performance Requirements. The ESIAs also describe a series of actions that will be taken to prevent, control, or otherwise mitigate potential impacts and to engage with key stakeholders. Requirements needed to avoid or control potentially significant impacts are described in this Environmental and Social Action Plan, which will be part of the financing agreement between EBRD and EPGE. The performance of the required actions will be reported to the Bank by EPGE and will be audited or otherwise evaluated by EBRD during construction and operation of the project.

The table below constitutes the ESAP¹. It identifies the actions required, the basis of the requirement, the timing of the action, and the criteria to be used for determining whether the goal of the action has been successfully achieved. Implementation of all the actions is the responsibility of EPGE. When other companies perform work under contract, EPGE will be responsible for their compliance with the requirements of the ESAP, even if direct oversight is by another a first-tier contractor. This is expected to be accomplished by inclusion of requirements in contracts and subcontracts, and by direct oversight and supervision by EPGE and/or its oversight contractor as needed. It is important to note that a third party (ENEL) will be responsible for rehabilitation, operation, and maintenance of the transmission line and the three substations. It is recognized that compliance by ENEL with ESAP requirements may be beyond EPGE’s control; however, EPGE will be expected to work with ENEL to ensure compliance and to monitor and report on ENEL’s performance.

¹ For purposes of this ESAP, “construction” includes all actions in the field to prepare and construct the various components of the wind farm, including turbines, roads, transmission lines, and the project substation; and to rehabilitate the transmission line from Chirnogeni to Basarabi and the existing substations (Chirnogeni, Cobadin, Basarabi), including tower repairs and replacement, and conductoring (that is, stringing new cable). “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.

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

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<i>No.</i>	<i>Action</i>	<i>Source of requirement</i>	<i>Date required</i>	<i>Target and Evaluation Criteria For Successful Implementation²</i>
0	Submit report to the Bank on environmental, social, health and safety performance, including status of each ESAP element and other agreed activities.	EBRD	- Each six months during construction - Annually during operation	Submission of reports on schedule and in a mutually agreed format.
1	PR 1: Environmental and social management			
1.1	Develop and implement integrated environmental, social, and occupational health and safety management systems equivalent to those under ISO 9000, ISO 14001, and OHSAS 18001	Best practice EBRD PR 1	- Develop systems prior to operation - Implement throughout operation	- Systems developed by qualified consultant, staff trained, systems implemented. - Status reported in each report to Bank
1.2	Appoint and maintain on-site a person to be responsible for overseeing occupational health and safety, to report directly to the project site manager, and subsequently to EPGE management.	Best practice EBRD PR 2	At all times during construction and operation	- Appointment of qualified official - Qualifications submitted with first report under 0 - Responsible person maintained at all times
1.3	Appoint and maintain a person to be responsible for environmental and social compliance, to report directly to the project site manager, and subsequently to EPGE management.	Best practice EBRD PR 1	At all times during construction and operation	- Appointment of qualified official - Qualifications submitted with first report under 0 - Responsible person maintained at all times
1.4	Establish and implement corporate policy and procedures for oversight of contractor environmental, occupational health and safety, and social (ESHS) performance during construction, to include (at a minimum): - Inclusion of appropriate ESAP and other legal requirements in contracts/subcontracts, including	Best practice EBRD PR 1	- Upon entry into contracts/subcontracts - Prior to contractor actions	Include in ESHS reports to Bank: Program description and adoption status Highlights of performance (appointments, inspections, etc.) Training Summaries of project and contractor

² Items required to be reported to the Bank will be presented in the semi-annual or annual reports required under item 0, unless noted otherwise.

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	requirement for staff/management training. - Assignment of clear responsibilities within EPGE and oversight contractor for contractor oversight - Regular inspections of contractors' construction camp and construction operations. - Contractor reports on performance sufficient to allow inclusion of data in ESHS reports to the Bank, and to allow EPGE to determine if corrective actions are needed. - Verification of training and professional credentials for contractor EHS managers and staff.			environmental and OHS performance
1.5	Acquire and comply with all required permits and authorizations	Romanian law EBRD PR 1	Prior to beginning any activities that require permits or authorizations	- All permits and authorizations received - Reports submitted to authorities as required - Compliance status reported to Bank
1.6	Implement the environmental and social monitoring and management plan that is part of the ESIA	EBRD PRs	As required by ESMMP	Report to Bank on highlights of implementation
1.7	Appoint an independent EHS consultancy to undertake periodic external monitoring of key ESHS issues as outlined in this ESAP and the ESMMP	EBRD PR 1 Best practice	- Appoint: prior to first disbursement - Monitor: annually throughout construction and for the first 2 years of operations; any additional monitoring requirements to be based on monitoring outcomes	Monitoring reports submitted to Bank with ESHS reports

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2	PR 2: Labor and working conditions			
2.1	Develop and implement an occupational health and safety (OHS) plan to guide all activities on project sites during site preparation, construction, and operation. Also require contractor plan/compliance. Requirements to include (but not be limited to): <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 EPGE plan - Oversight of contractor OHS implementation, including mandatory reporting - Recording incident statistics, including total work hours, lost time incidents, major injuries/fatalities, etc. 	Best practice EBRD PR 2	EPGE (or lead contractor) plan: prior to construction Contractor plan: prior to contractor activities on-site	<ul style="list-style-type: none"> - Submission and approval of EPGE plan by independent OHS professional and/or EBRD prior to construction - Submission of contractor OHS plan(s) and approval by EPGE (or oversight contractor) - Report to Bank on OHS issues, including incident statistics and status of training (to cover EPGE and contractor workforces) - Report to Bank at time of major accidents and/or fatalities
2.2	Support local labor force by: <ul style="list-style-type: none"> - 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 - Construction camps must comply with Romanian law and provide adequate heating, showering and cooking 	Romanian Law EBRD PR 2 Best practice	Prior to workforce selection and prior to establishment of work camps	<ul style="list-style-type: none"> - Local announcements when hiring - Camp conditions compliant with EBRD PR2 and international best practice - Training for local workers - Wages comparable to regional averages

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	facilities.			
2.3	Develop a formal grievance mechanism for employees and contractors and disseminate information about its uses to the workforce, in the language(s) of the workers (note: this is separate from the stakeholder grievance mechanism required under PR10)	EBRD PR 2	Develop and implement prior to construction and throughout project performance	<ul style="list-style-type: none"> - Submission to Bank (with first report under item 0) of grievance procedure for review and approval - Thereafter, report to Bank to include all worker grievances and resolutions
2.4	Develop/update HR Policy and Procedures Manual to fully comply with national law and EBRD requirements (Romanian law to take precedence if there are any conflicts with lender requirements).	Romanian law EBRD PR 2	Within 3 months of commitment of funds	<ul style="list-style-type: none"> - Submission of HR Policy and Procedures to the EBRD for review - Include in report to Bank data on workers, including dismissals and new hires, collective bargaining developments, status of medical checks, etc. - Report to Bank the numbers of workers in various categories (management vs skilled vs unskilled, local vs non-local vs expatriate, women vs men)
2.5	Make the policy and procedures/manual (2.4 above) or a detailed summary available to employees in their language(s)			Availability of materials for workers in their languages
3	PR 3: Pollution prevention and abatement			
3.1	Develop and implement solid waste management plan for all wastes, including chemicals, fuel, oil, construction debris, domestic/household solid wastes. Ensure all off-site management is by licensed companies and in licensed places	Romanian Law EBRD PRs1, 3 Best practice	<ul style="list-style-type: none"> - Develop: prior to start of construction - Implement: throughout project performance 	Development: <ul style="list-style-type: none"> - Review and/or approval of plan by authorities, if required - Require compliance in all contracts - Report to Bank on status of plan

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				and approval Implementation: - All wastes managed in accordance with approved plan - Reports to authorities as required in permits - Reports to EPGE by all contractors on amounts, types, and management of all solid wastes - Reports to Bank on amounts, types, and management of all solid wastes (by EPGE and all contractors) - Immediate report to Bank and relevant authorities of significant incidents and response actions
3.2	Implement air quality management practices to control construction dust and vehicle emissions, including (at a minimum): - Periodic observation monitoring for visible dust near construction/ traffic areas - Implement dust suppression as needed in dry/dusty conditions (water, gravel, etc.) - Maintain vehicles/equipment in good running condition - Obey speed limits in traffic management plan (item 4.1) - Cover loads as needed to prevent dust	Romanian Law EBRD PR 3 Best practice	- Develop: prior to construction - Implement: throughout construction	Report to Bank on monitoring results and highlights of dust control/ suppression activities
3.3	Develop and implement erosion and sedimentation control plan for all areas where the ground will be	Romanian Law EBRD PR 3	- Develop: prior to construction - Implement: throughout	Minimize erosion into streams Review of plan by authorities as

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	<p>disturbed during construction in accordance with good international practices, including at a minimum):</p> <ul style="list-style-type: none"> - Minimize disturbance on slopes and in/near water - Repair ruts and other features caused by work in wet weather - Segregate topsoil from subsurface material and store in secure area for reuse - Protect storage pile(s) with covers, including vegetative cover (native grass species) as needed to prevent erosion and dessication. - Use best practices to prevent or retard run-off <p>Work with ENEL to include similar requirements in their work and their contractors' work.</p>	Best practice	construction	<p>required by permits Submission of plan with first EHS report to Bank Report to Bank on highlights of erosion control program</p>
3.4	<p>Provide portable toilets or other means to contain sanitary wastes as needed, at all work locations. Discharge wastes to appropriate treatment as required by authorities.</p>	Romanian Law EBRD PR 3 Best practice	Throughout project performance	<ul style="list-style-type: none"> - No unauthorized discharges - No releases of untreated sanitary wastes - Report to Bank on any accidental releases/discharges
4	Community health, safety, and security			

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4.1	<p>Develop and implement – and require contractors to 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 (speed limits, training, routes to follow, avoidance of sensitive areas) - 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 - 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 - Make best effort to minimize disruption and closures of public roads 	EBRD PR 4 Best practice	<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 Bank 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	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 Bank on all incidents
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	Romanian law EBRD PR 5	- Prior to economic loss, unless for compensation for damages	- All replacement and compensation at fair market value

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	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.			- Report to Bank on all economic losses due to project and any 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 then identify any changes.	EBRD PR 6 Best practice	- Develop: prior to construction - 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 by Romanian Ornithological Society
6.2	Develop and implement program of periodic bat and bird mortality monitoring at all turbines and at wind mast, with emphasis on migration and breeding seasons	EBRD PR 6	Wind mast: construction and operation Turbines: throughout operation	- Review and approval of plan by independent expert, review by Romanian Ornithological Society - Report immediately any excess or unusually high mortality
6.3	Appoint independent expert(s) to conduct independent 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). Beginning at year 2, expert to make annual recommendation on continuation of monitoring under 6.1.	EBRD PR 6 Best practice	- 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 provided to Bank - Evaluation report from expert, implementation of recommended changes (if needed) - Submission of expert's report to Bank, including proposed changes to operating parameters
6.4	Establish and enforce rules for workers to prohibit	Romanian law	Throughout construction and	- No violations of hunting, fishing,

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	hunting, fishing, wood-cutting except as allowed with lawful permits	EBRD PR 6	operation	wood-cutting rules - Report to Bank on actions taken to control worker behavior, including incidents
6.5	Prepare and implement landscaping plan for all project elements	Romanian law EBRD PR 6 Good practice	- Complete plan for each area/element before completion of construction of that element - Implement when construction is complete for each element	- Landscaping plans completed. - Report on completion of plans and status of implementation
8	PR 8: Cultural heritage			
8.1.	In collaboration with Minister of Culture and/or regional representatives, conduct pre-construction surveys for archaeological and develop and implement chance find procedures, including training of all workers (EPGE and all contractors).	Romanian law EBRD PR 8	- Survey conducted prior to construction - Training conducted prior to worker activities - Program implemented throughout construction.	- Report to Bank on surveys and chance find procedures, and on any discoveries made
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 items 4.1)	EBRD PR 10 Best practice	Throughout construction and operation	- Report to Bank on consultation activities, including notices given - Report to Bank on all 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 this ESAP	EBRD PR 10 Best Practice	Semi-annually during construction and annually during operation	- Report to Bank on consultation activities - Report to communities on status