



## Jbel-Sendouq Khalladi Wind Farm and 225kV Power Line Project Tangier, Morocco

## **Environmental and Social Action Plan**

August 2015





## **Environmental and Social Action Plan Khalladi Wind Farm Project**

Note: The personnel hired (or to be hired) by UPC renewables mentioned in the ESAP includes hired personnel (or to be hired) by ACWA Power Morocco.

| No. | Action   | Environmen<br>tal & Social<br>Risks<br>(Liability/Be<br>nefits)  | Requirement (Legislative, EBRD PR, International Best Practice) | Resources,<br>Investment<br>Needs,<br>Responsibility                          | Timetable   | Target and Evaluation Criteria for Successful Implement ation |
|-----|--|--|---|---|---|---|
| EP1 | Assessment and Management of Environmental an  | d Social Impact  | s and Issues  |   |   |   |
| 1.1 | <ul> <li>Environmental and Social Monitoring Report Submit to the EBRD a progress report: <ul> <li>Implementation status of the ESAP</li> <li>Environmental and social performance report in relation project activities/status</li> </ul> </li> </ul> | Environmen<br>tal and<br>social<br>monitoring                    | EBRD PR1  Loan Agreement requirement                            | UPC renewables  The format of the annual report will be provided by the EBRD. | Constructi on: every six months  Operation: the end of the first quarter of each year during the credit period. | Reports<br>submitted<br>and<br>approved<br>by the<br>EBRD.    |
| 1.2 | the construction phase assign within the UPC renewables team the following three (3) responsibilities (one to three personnel, and providing the necessary resources), under the direct authority of the Project Manager:                              | Implement<br>ation of<br>regulatory<br>requiremen<br>ts and ESAP | Moroccan<br>legislation<br>EBRD PR1                             | Personnel engaged by UPC renewables (these three responsibilities             | Upon entry<br>into force<br>of the<br>ESAP and<br>for the<br>duration of  | The three leaders are recruited and retained in               |





|      | <ul> <li>"Environment" responsibility in charge of compliance with environmental legislation Moroccan (including environmental recommendations of the EIA and specifications) and the implementation of the ESAP (EP1, EP3 and EP6)</li> <li>"Social" responsibility in charge of compliance with legislation Moroccan labor, social recommendations of the EIA and specifications, and implementation of the ESAP (EP2, EP5, EP10 and EP8)</li> <li>"Health and Safety" responsibility in charge of compliance with health and safety legislation Moroccan (including the recommendations of the EIA and specifications) and the implementation of the ESAP (EP4)</li> </ul> |                                     | can not be<br>outsourced)<br>and resources<br>must be<br>allocated                 | the constructio n period.   | office until<br>the end of<br>the<br>constructi<br>on phase   |
|------|---|-------------------------------------|--|---|---|
| 1.3a | Prepare an Environmental and Social Management and Monitoring Plan that is based on the Framework ESMMP   | Moroccan<br>legislation<br>EBRD EP1 | UPC renewables with the support of a Specialist Consultant                         | By the end<br>of the<br>consultatio<br>n period<br>for the<br>additional<br>ESIA<br>document<br>s | The ESMMP is prepared by UPC Renewabl es and approved by EBRD |
| 1.3b | Implementation of the Environmental and Social Management and Monitoring Plan (ESMMP English) by the Environmental, Social and Health and Safety Coordinator(s) during the construction phase, including notification to the EPC contractors of their obligations in  | Moroccan<br>legislation<br>EBRD PR1 | Organized by<br>the<br>coordinator(s),<br>with support<br>from external<br>service | After 1.3.a<br>and as<br>soon as<br>the<br>coordinato<br>rs are hired                             | The<br>ESMMP is<br>implement<br>ed                            |





|     | relation to the ESMMP.   |  |                                     | providers<br>when needed  | and during<br>the<br>constructio<br>n phase  |  |
|-----|--|--|-------------------------------------|---|--|--|
| 1.4 | the operation phase designate within the team UPC renewables the coordinator(s) "Environmental, Social, Health and Safety" in charge of compliance with Moroccan legislation (including environmental recommendations of the EIA and specifications) and the implementation of the ESAP for the operation phase. | Implement<br>ation of<br>regulatory<br>requiremen<br>ts and ESAP | Moroccan<br>legislation<br>EBRD PR1 | personnel engaged by UPC renewables (these three responsibilities can not be outsourced)  | 6 months<br>before the<br>end of the<br>constructio<br>n phase   | Coordinat or(s) appointed and held in position throughou t the operating phase           |
| 1.5 | Update of the Environmental and Social Management and Monitoring Plan for the operation and implementation phase.  |  | Moroccan<br>legislation<br>EBRD PR1 | Organized by the coordinator(s) "Environmenta I, Social, Health and Safety", with support from external service providers when needed | ESMMP updated before the start of the operationa I phase  ESMMP implement ed during the operationa I phase | ESMMP updated and submitted for no objection to the EBRD  The ESMMP is then implement ed |
| 1.6 | Implementation of an Environmental and Social Management System (ESMS) Integrating ISO 9001, ISO 14001 and OHSAS 18001 covering all project activities for the operational phase   | Quality Assurance and Continuous Improveme                       | EBRD PR1                            | UPC<br>renewables<br>with the<br>possible<br>assistance of  | Prepared system: during the first year of operation  | Integrated prepared and certified.   |





|     |   | nt                   |                                     | a specialized firm to prepare the ESMS. Certification audits by a certified firm. | Certificatio<br>n: in the<br>second<br>year of<br>operation   | Certificati<br>on<br>renewed<br>regularly   |
|-----|---|----------------------|-------------------------------------|---|---|---|
| 1.7 | Quality, and Performance control of environmental, social and health / safety of the work or service providers:  During the construction and operational phases, for contracts for services or work more than one million Euros, the providers are required to:  - Appoint a HSE (Health Safety Environment Health)  - Include in their offers HSE risk management specific plan that comply with Moroccan legislation and the E&S EBRD policy: (i) review of the risks and HSE organization, (ii) personal protective equipment, (iii) management of solid and liquid waste, (iv) public protection and safety of neighboring communities to construction, (v) road traffic management and (vi) other specific measures that UPC renewables would like to see clarified. | Quality<br>assurance | Moroccan<br>legislation<br>EBRD PR1 | Request by UPC renewables  Action to be implemented by the provider.              | Upon entry<br>into force<br>of the<br>ESAP and<br>for the<br>duration of<br>the<br>funding<br>agreemen<br>t | Request systematic ally made to the service provider.  HSE Manager appointed HSE Plan prepared by the provider and implement ed after approval by UPC renewabl e. |
| 1.8 | External audit in case of complaint or significant non-compliance On request of the EBRD, hire an independent consultant (chosen by agreement between   |                      | Moroccan<br>legislation<br>EBRD PR1 | UPC<br>renewables   | On request<br>of the<br>EBRD, in<br>case of   | Audit<br>conducte<br>d  |





|      | UPC renewables and EBRD) for an E & S audit and recommendations for dealing with complaints or non-compliances.  |  |                                     |  | complaint<br>or<br>significant<br>non-<br>complianc<br>e.<br>(Max 2<br>audits per<br>year) |   |
|------|--|--|-------------------------------------|--|--|---|
| EP 2 | Labour and Working Conditions  |  |                                     |  |  |   |
| 2.1  | Complaint management: Prepare and implement a complaints handling mechanism available to UPC renewables employees and employees of the EPC contractors and their subcontractors  | Conflict<br>prevention   | EBRD PR2                            | UPC<br>renewables.   | Before the<br>start of<br>work   | Mechanis<br>m<br>implement<br>ed and<br>effective   |
| 2.2  | Human Resources Policy Prepare and make available permanently to all employees a Human Resources policy, in line with the H&S policy of the EBRD and including:  • equitable treatment, non-discrimination and equal opportunities for all workers;  • the right to membership in trade unions;  • No child and forced labour. | Transparen cy and Human Resources Complianc e Managem ent              | Moroccan<br>legislation<br>EBRD PR2 | UPC<br>renewables.   | From the first year after the entry into force of the ESAP.                                | policy<br>paper<br>"Human<br>Resources<br>Policy"<br>prepared<br>and freely<br>accessible |
| 2.3  | <ul> <li>Human Resources of the EPC contractor:</li> <li>Require the EPC contractors working in</li> <li>Morocco:</li> <li>to manage human resources in</li> <li>accordance with the Moroccan legislation</li> <li>and with the EP2 of the H &amp; S policy of the</li> <li>EBRD</li> </ul>                                    | Preventing internal risks related to the presence of a large number of | Moroccan<br>legislation<br>EBRD PR2 | Requirement made by UPC renewables.  Action to be implemented by the EPC | Each EPC contractor managem ent plan must be submitted to UPC                              | Requirem ent transmitte d to each EPC contractor  |





|             | <ul> <li>To prepare a human resource management plan for the construction phase including:         <ul> <li>The conditions of employment of local residents,</li> <li>Working conditions,</li> <li>The conditions of accommodation and catering.</li> </ul> </li> </ul>                               | workers   |          | contractors.   | renewable<br>s before<br>work<br>begins  | Human Resources Managem ent Plan for each EPC contractor approved by UPC renewabl es social responsibili ty coordinat or. |
|-------------|---|---|----------|--|--|---|
| 2.4<br>EP 3 | Personal safety and security: Prior to the engagement (direct or via a service provider) of security staff, conduct a study of the risks (health, safety, working conditions) and on this basis prepare a management plan to apply to this activity.  Resource Efficiency and Pollution Prevention an | Anticipation n and prevention of risks that security personnel will be exposed. | EBRD PR2 | EPC contractor for the construction phase.  UPC renewables for the operational phase | Risk assessment and managem ent plan prepared before the start of the constructio n phase  Updated plan for the operationa I phase | Risk and Managem ent Plan prepared and implement ed (directly or via a service provider)                                  |





| 3.1 | Water supply: Include in the contract documents the obligation of the EPC contractors to supply their construction and site installations with water purchased from an authorized source (prohibition to pump from underground or surface sources)  | Preventing<br>the risks of<br>conflicting<br>use of<br>water<br>resources | Moroccan<br>legislation<br>EBRD PR3    | Notification of<br>the EPC<br>contractors by<br>UPC<br>renewables                                   | Before the<br>start of<br>work<br>constructio<br>n                    | Obligation / restriction included in the contract document s of the EPC contractor s. |
|-----|---|---|--|---|---|---|
| 3.2 | <ul> <li>Prevention and control of pollution during the construction phase: Require the preparation and the implementation (after approval by UPC renewables) of the following:</li> <li>waste management plan (all of waste: solid or liquid, domestic or construction waste, etc)</li> <li>soil conservation plan: land management, erosion control, revegetation of temporary sites, access roads and circulation, and borrow or disposal areas.</li> <li>The uncontrolled disposal of spoils along the roads/tracks is prohibited.</li> </ul> | Prevention<br>and<br>Control of<br>Pollution                              | Moroccan<br>legislation<br>EBRD PR3    | Requirement<br>by UPC<br>renewables<br>Action to be<br>implemented<br>by the EPC<br>contractors.    | Prior to the<br>start of<br>work                                      | Plan<br>prepared,<br>approved<br>and<br>implement<br>ed                               |
| 3.3 | Prohibition of use of pesticides The nature of the project does not justify the use of pesticides (insecticides and herbicides) during the construction or operation phase. Their use is prohibited.  | Prevention<br>and<br>Control of<br>Pollution                              | EBRD PR3 Internationa I best practices | Requirement<br>by UPC<br>renewables<br>Action to be<br>implemented<br>by the EPC<br>contractors for | From the start of work and for the duration of the financial agreemen | Prohibition<br>formulate<br>d and<br>applied  |





| 3.4  | Flicker effect  | Prevention   | EBRD PR3                            | the construction phase and UPC renewables for the operational phase UPC                          | t  During the  | Recomme  |
|------|---|--|-------------------------------------|--|--|--|
| 3.4  | Implementation of the recommendation of the Flicker impact study  | of Flicker<br>effect   | Internationa<br>I best<br>practices | renewables   | operationa<br>I phase                                      | ndations<br>implement<br>ed  |
| EP 4 | Health and Safety   |  |                                     |  |  |  |
| 4.1  | Fire prevention and emergency plan Prepare a plan for the prevention of fire hazards and the management of emergency situations. The plan must include the safety of workers and the public; and will be presented to civil security authorities. | The risk of fire in the hills adjacent to the Project is a major risk to the safety of personnel | EBRD PR4                            | Requirement<br>by UPC<br>renewables<br>Action to be<br>implemented<br>by each EPC<br>contractor. | Before the<br>start of<br>work                             | Plan prepared and approved by UPC renewabl es, subject to civil protection authorities and implement ed. |
| 4.2  | HSE Plan for major works: The measure in 1.7 of the ESAP (Quality, and Performance control of environmental, social and health / safety of the work or service providers) applies to the EPC contractors and                                      | Risk<br>prevention<br>for<br>personnel<br>exposed to   | EBRD PR4                            | Requirement<br>by UPC<br>renewables<br>Action to be  | HSE Plan<br>each EPC<br>contractor<br>to prepare<br>before | HSE Plan<br>prepared<br>by each<br>EPC<br>contractor   |





|      | their subcontractors.  | work<br>activities                                    |  | implemented<br>by the EPC<br>contractors. | work  | and implement ed after approval by renewabl es UPC. |
|------|--|---|--|---|---|---|
| EP 5 | Land Acquisition, Involuntary Resettlement and   |   |  |   | l   |   |
| 5.1  | Restoring Livelihoods: Preparation and implementation of a plan to restore livelihoods, based on the Framework LALRPs and Social Impact Assessment, with particular attention to gender aspects. | Risk<br>prevention,<br>livelihood<br>losses.          | EBRD PR5 Internationa I best practices | UPC<br>renewables                         | Plan prepared and approved by the EBRD before the start of works that may affect livelihoods. Implement ation immediate ly after approval | Prepared<br>and<br>implement<br>ed Plan             |
| EP 6 | Biodiversity and Living Natural Resources mana   |   |  |   |   |   |
| 6.1  | Biodiversity Protection Plan Implementation of biodiversity protection plan  | Prevention<br>of damage<br>to<br>biodiversity<br>Site | Moroccan<br>legislation<br>EBRD PR5    | UPC<br>renewables                         | As soon as Environme nt Manager is engaged and during   | Plan<br>implement<br>ed                             |





|                 |  |   |                         |                 | the entire<br>funding<br>period   |  |
|-----------------|--|---|-------------------------|-----------------|---|--|
| <b>EP 8</b> 8.1 | Cultural Heritage Unforeseen encounters:   | Protection of cultural                    | Moroccan                | UPC renewables. | Before the start of the   | Procedure  |
|                 | Develop chance find procedure. Train/advise workers of the types of cultural heritage that could be discovered and what to do in case of unexpected discovery.   | heritage                                  | legislation<br>EBRD PR8 | renewapies.     | constructio<br>n.   | prepared<br>before<br>work.<br>Inform<br>workers.  |
| EP<br>10        | Information Disclosure and Stakeholder Engage  | ment                                      |                         |                 |   |  |
| 10.1            | Implement SEP prepared for the Project. The implementation of the SEP should ensure access to information of all parties involved in the project, including the vulnerable groups (illiterate women heads of household, etc.). The plan will be reviewed and adapted when the UPC renewables Social Manger deems it is necessary and at least at the start of the operational phase.  Implement the Stakeholder Engagement Plan (SEP), including the grievance mechanism for external stakeholders, and a second round of public consultations which will specifically target women. | Public information, complaint managem ent | EBRD PR10               | UPC renewables. | As soon as Social Manager is engaged and during the entire funding period. The public consultation following the disclosure of environmental and social documents should be undertake | The stakehold er participati on plan is implement ed by UPC renewabl es and updated in due course. |

## Official Use





|      |   |   |           |                    | n before<br>the work<br>begins.                             |   |
|------|---|---|-----------|--------------------|---|---|
| 10.2 | Public information on environmental and social performance of the project Publish on line and up date at least annually, a comprehensive set of information selected by UPC and demonstrating good environmental and social performance of the Project. | Demonstrati<br>on of the<br>environment<br>al & social<br>performanc<br>e of the<br>Project | EBRD PR10 | UPC<br>renewables. | From the first year after the entry into force of the ESAP. | Existing web page and updated annually. |