

CASABLANCA BIFACIAL PV POWER PROJECT – BRAZIL Environmental and Social Action Plan (ESAP)

No.	Area	Action	Product/Deliverable	Completion date					
PS 1: Ass	PS 1: Assessment and Management of Environmental and Social Risks and Impacts								
1.1	E&S Assessment and Management System	Develop, for the construction phase, a specific Environmental and Social Management System (ESMS) applicable to the Project, including aspects contained in the Environmental Reports (RAS) and the Simplified Environmental Licenses (LAS) of each power plant. The ESMS must encompass the construction and operation phases. Adopt the ESMS for the construction phase. Develop an Environmental and Social Management System (ESMS). Adopt the ESMS for the operation phase.	construction phase. 2. Evidence of ESMS adoption for the operation phase. 3. ESMS (manual and procedures) for the operation phase. 4. Evidence of ESMS adoption for the operation phase.	 30 days prior to the start of the construction phase. 15 days prior to the start of the construction phase and later, in the Environmental and Social Compliance Report (ESCR). 30 days prior to the start of the operation phase. 30 days prior to the start of the construction phase and later, in the ESCR. 					
1.2	Identification of Risks and Impacts	Obtain from the National Mining Agency (ANM) blocking of mining rights for the Project area(s), and compensate third parties, if necessary.	Proof of third-party compensation.	Prior to the start of the operation phase. Prior to the start of the operation phase.					
1.3	Organizational Capacity and Competency	Establish and implement the ESMS organizational structure for the Project's construction and operation phases, including: i) the Company's own team of environmental, social, health and safety (ESHS) staff and contractors' (EPC and O&M) ESHS staff, with clear definition of responsibilities and reporting structure.	Project, including own and EPC contractor's employees for the construction phase. 2. Evidence of ESMS adoption for the construction phase.	1. 15 days prior to the start of the construction phase. 2. 15 days prior to the start of the construction phase 3. 30 days prior to the start of the operation phase. 4. 30 days prior to the start of the operation phase.					
1.4	Organizational Capacity and Competency	Develop the ESMS team's training matrix and schedule, in relation to local laws and performance standards (PS) applicable for the construction and operation phases. Implement the ESMS team's training.	ESMS training matrix and annual training schedule for the construction phase. ESMS training matrix and annual training schedule for the operation phase. ESMS team's training report.	1. 15 days prior to the start of the construction phase 30 days prior to the start of the operation phase In the ESCR.					
1.5	Emergency Preparedness and Response	Submit the Fire Department Inspection Certificate (Auto de Vistoria do Corpo de Bombeiros, AVCB). The fire prevention and protection system to be installed should also be compliant with international standards (NFPA standards).	Vistoria do Corpo de Bombeiros, AVCB).	30 days prior to the start of the operation phase.					
1.6	Monitoring and Review	Submit evidence of implementation of the ESMS monitoring programs and define the KPI to be used to assess program efficacy for the construction and operation phases.	ESMS monitoring reports and key performance indicators for the construction and operation phases.	Periodically in the ESCR.					
1.7	Stakeholder Engagement	Develop a Stakeholder Engagement Plan (SEP) including: i) identification and mapping of all parties potentially affected, both directly and indirectly, as well as those identified as vulnerable; ii) public consultation protocols; iii) procedures for stakeholder engagement and communication designed to	Reports containing evidence of, and	1. 15 days prior to the start of the construction phase. 30 days prior to the start of the					



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		establish the most suitable communication channel for each group and provide the groundwork for participatory planning, implementation and monitoring, and iv) a plan for monitoring and assessment of social investment programs.		operation phase and afterwards, in the ESCR.
1.8	Stakeholder Engagement	Conduct: i) an on-line Public Consultation (PC) event prior to the start of the construction phase; ii) a second, face-to-face, PC event; and iii) submit a Stakeholder Engagement Report.	Evidence that the on-line PC has been held. Evidence that the face-to-face PC has been held. Stakeholder Engagement Report.	 15 days prior to the start of the construction phase. 30 days after lifting of the mobility restrictions adopted (by the federal, state or municipal governments) to control de COVID-19 pandemic. Periodically in the ESCR.
1.9	External Communication and Grievance Mechanisms	Develop and implement an external communication and grievance mechanism tailored to the Project, including: i) a contact procedure whereby the Company may be reached through anonymous or open communication to submit queries, express concerns or lodge complaints; ii) a person responsible for receiving, recording and processing all grievances; iii) procedures to record, analyze, categorize, investigate and determine solution or repair options; iv) definition of how decisions made and measures taken to resolve grievances are communicated; v) definition of different communication forms and channels to facilitate information disclosure to different publics, such as suggestion boxes, and toll-free (0800) line, and vi) handling of complaints from vulnerable groups.	External Communication and Grievance Mechanism. Evidence of mechanism implementation. Assessment of 0800 line and installation of signs.	30 days prior to the start of the construction phase. 15 days prior to the start of the construction phase and afterwards, in the ESCR. 15 days prior to the start of the construction phase.
PS 2: Lab	or and Working Conditions			
2.1	Working Conditions and Management of Worker Relationship	Develop specific procedures relative to Working Conditions and Management of Worker Relationship including, at least: i) general provisions; ii) overall obligations and rights; iii) recruitment and hiring policy; iv) occupational health and safety; v) local hiring policies; vi) internal grievance mechanism comprising contracted and subcontracted workers; vii) training activities; and ix) retrenchment plan for demobilization activities (to be adopted by all contractors and subcontractors in respect of their workers). Include contract provisions ensuring subcontractors' compliance with the Working Conditions Procedures and the Worker Relationship Plan.	Working Conditions Procedures. Worker Relationship Plan. Copy of contract section where contractor and subcontractors adhere to items 1 and 2 above.	 30 days prior to the start of the construction phase. 30 days prior to the start of the construction phase. 30 days prior to the start of the construction phase.
2.2	Working Conditions and Management of Worker Relationship	Establish a Local Hiring Policy that sets a minimum hiring quota, assures reasonable working conditions, and defines accommodation securing good living conditions for EPC workers and that: i) describes all the relevant information necessary to manage the expectations of local communities such as available positions, types of employment, qualifications and skills required, and duration of employment; and) is included in the EPC contract.	Local Hiring Policy document. Evidence of inclusion in the EPC contract.	30 days prior to the start of the construction phase. 30 days prior to the start of the construction phase.
2.3	Occupational Health and Safety	Develop and adopt procedures designed to supervise and monitor occupational health and safety for the construction and operation phases comprising workers and third parties, as well as the following aspects: i) occupational risk mitigation measures; ii) procedures required by Brazilian laws; iii) inspection of personal and collective protective equipment; iv) inspections of firefighting equipment; v) procedures designed to prevent,	Occupational Health and Safety Management Plan for the construction phase. Evidence of adoption of the OHS Management Plan for the construction phase.	30 days prior to the start of the construction phase. 15 days prior to the start of the construction phase and afterwards, in the ESCR. 30 days prior to the start of the



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		monitor and investigate accidents; viii) monitoring of training activities; vii) performance indicators; viii) audit and inspection program, and ix) Covid-19-specific prevention and control procedures.	 3. 4. 	Occupational Health and Safety Management Plan for the operation phase. Evidence of adoption of the OHS Management Plan for the operation phase.	4.	operation phase. 30 days prior to the start of the operation phase and afterwards, in the ESCR.	
2.4	Workers Engaged by Third Parties	Include provisions in EPC contracts for construction and O&M to ensure compliance with ESMS standards.	1.	Copy of sections of EPC contract where ESMS standards are described.	1.	30 days prior to the start of the construction phase.	
DO 0 D			2.	Copy of sections of O&M contract where ESMS standards are described.	2.	30 days prior to the start of the operation phase.	
	ource Efficiency and Pollution P						
3.1	Resource Efficiency	Develop and adopt a resource efficiency program for the Project, for the construction and operation phases, including: i) water consumption data, and ii) key performance indicators in relation to the operation phase.	1.	Resource efficiency program for the project and evidence of implementation for the construction phase.	1. 2.	15 days prior to the construction phase.15 days prior to the construction	
			2.	Evidence of program adoption for the construction phase.	3.	phase and afterwards, in the ESCR. 30 days prior to the operation	
			3.	Resource efficiency program for the project and evidence of implementation for the operation phase.	4.	phase. 30 days prior to the operation phase and afterwards, in the ESCR.	
			4.	Evidence of program adoption for the construction phase.			
3.2	Pollution Prevention	Develop and adopt a waste and pollution prevention and management program for the Project construction phase, including: i) hazardous material handling and ii) effluent management.	1.	Waste and pollution prevention and management program for the construction phase.	 1. 2. 	30 days prior to the construction phase.15 days prior to the construction	
			2. 3.	Evidence of program adoption. Waste management program for the	3.	phase and afterwards, in the ESCR. 30 days prior to the construction	
			4.	construction phase. Evidence of program adoption.	4.	phase. 15 days prior to the construction phase and afterwards, in the ESCR.	
3.3	Pollution Prevention	Develop and adopt a waste prevention and management procedure for the operation phase, including provisions for disposal of PV solar panels.	1.	Waste prevention procedure for the operation phase.	1. 2.	30 days prior to the operation phase. 30 days prior to the operation phase	
			2. 3.	Evidence of program adoption. Waste management program for the operation phase.	3. 4.	and afterwards, in the ESCR. 30 days prior to the operation phase. 30 days prior to the operation phase	
			4.	Evidence of program adoption.	٠.	and afterwards, in the ESCR.	
3.4	Resource Efficiency	Develop and implement a Project-specific procedure to estimate GHG emissions.	1.	Project-specific procedure to estimate GHG emissions.	1.	60 days after signing the loan agreement.	
			2.	Evidence of program implementation.	2.	60 days after signing the loan agreement and afterwards, in the ESCR.	
PS 4: Con	PS 4: Community Health and Safety						
4.1	Community Health and Safety	Develop and adopt a traffic management plan identifying potential risks associated with the increase in vehicle traffic during construction, procedures	1.	Traffic management program for the construction phase.	1.	30 days prior to the start of the construction phase.	
		to monitor and supervise directly the EPC routes and days/times when loads are moved.	2.	Evidence of plan implementation.	2.	15 days prior to the start of the construction phase and afterwards,	



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				in the ESCR.		
4.2	Community Health and Safety	Develop a community health and safety program for the construction phase, including site identification and assessment, and establish prevention and control measures, including: (i) measures relative to altered air quality (dust emission and wetting activities), and (ii) measures relative to altered sound levels (identification of neighboring communities that are likely to be affected).	 Community safety program for the construction phase. Implementation evidence. 	30 days prior to the start of the construction phase. 15 days prior to the start of the construction phase and afterwards, in the ESCR.		
4.3	Community Health and Safety	Develop and implement a community health program, including: (i) education initiatives in relation to the prevention of contagious diseases, particularly COVID-19; (ii) activities in connection to the prevention of sexually transmitted diseases, alcohol and drug use, and sexual exploitation of children and youth; (iii) COVID-19 prevention and follow-up of cases.	 Community health program. Implementation evidence. 	30 days prior to the start of the construction phase. 15 days prior to the start of the construction phase and afterwards, in the ESCR.		
4.4	Community Health and Safety	Develop and adopt mitigation measures of the macro drainage study containing seasonality t of possible floods and whether the Project will worsen that condition and measures required to be adopted if the current situation worsens; and assessment of areas susceptible of suffering erosion and silting, and description of prevention and control measures.	on, ii) 2. Evidence of implementation of mitigation measures.	30 days prior to the start of the construction phase. 31 days prior to the start of the construction phase and afterwards, in the ESCR.		
4.5	Community Health and Safety	Assess the impacts of land use and occupation and landscape deteriorati resulting from Project implementation as a whole, considering the Master Plan the Municipality of Pirapora, and any potential impacts on urban expansion area and implement mitigation measures.	of 2. Evidence of implementation of mitigation	1. 60 days after signing the loan agreement. 2. Periodically in the ESCR.		
4.6	Security Personnel	Draft and implement a Project-specific security management plan, taking reference the IFC's "Good Practice Handbook: Use of Security Forces: Assessi and Managing Risks and Impacts".	as 1. Specific security management place evidence. 2. Evidence of plan implementation.	an and 1. 60 days after signing the loan agreement. 2. Periodically in the ESCR.		
PS 5: Lan	d Acquisition and Involuntary R		·			
5.1	Resettlement	Develop and implement: i) a Resettlement Action Plan including: a) appropriate socioeconomic benchmark survey to identify any population displac by the Project and assess who will be entitled to receive compensation a assistance, and b) the link and application of the stakeholders engageme procedure and grievance mechanisms; and ii) a Livelihood Recovery Plan for taffected families, if applicable.	2. Evidence of implementation of the Res Action Plan.	1. 30 days prior to the start of the construction phase. 2. 15 days prior to the start of the construction phase and afterwards, in the ESCR. 3. 30 days prior to the start of the construction phase. 4. 15 days prior to the start of the construction phase and afterwards, in the ESCR.		
		ainable Management of Living Natural Resources		_		
6.1	Biodiversity Protection and Conservation	Develop a Biodiversity Management Plan, including mitigation measures a monitoring activities during the construction and operation phases, especially flora and fauna classified as vulnerable, endangered or which may be directly indirectly impacted by the Project.	for construction phase	phase. 2. 15 days prior to the start		



					4.	phase. Evidence of implementation of the Biodiversity Management Plan for the operation phase.	3.	and afterwards, in the ESCR. 30 days prior to the start of the operation phase. 30 days prior to the start of the operation phase and afterwards, in the ESCR.
İ	PS 8: Cult	PS 8: Cultural Heritage						
-	8.1	Protection of Cultural Heritage in Project Design and Execution	1. 2. 3.	Submit evidence of approval by the National History and Art Institute (IPHAN) of the cultural heritage management and recovery program. Implement the cultural heritage management and recovery program approved by the IPHAN. Disseminate program to the local community and schools.	1. 2. 3.	Approval by the IPHAN of the Archaeological Impact Assessment Report. Evidence of implementation and dissemination to the local community and schools. Evidence of dissemination to the local community and schools.	1. 2.	Before commencement of works. Before commencement of works and periodically in the ESCR. Periodically in the ESCR.