

Environmental and Social Review Summary (ESRS) Providencia Solar BESS Project – El Salvador

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1. General Information of the Project and Overview of Scope of IDB Invest's Review

The project consists of the financing of a battery energy storage system ("BESS") with a nominal energy capacity of 5.4MW (the "Project" or the "BESS Project") that will be installed in the existing photovoltaic ("PV") facilities of the Providencia Solar S.A. de C.V. (the "Company" or "Providencia") in El Salvador.

Due to the travel restrictions imposed by the COVID-19 Pandemic, the Environmental and Social Due Diligence ("ESDD") was done remotely. This process included: i) a desk review of relevant environmental and social ("E&S") information received from the Company, including an Environmental Impact Assessment ("EIA") for the Project; and ii) videoconferences with representatives of Providencia and the Operation and Maintenance ("O&M") Contractor. This information was in addition to that produced by IDB Invest's supervision activities of its existing investment in the Providencia Solar PV Project (the "Providencia Solar Plant" or the "Plant") and its knowledge of the Company's corporate-level Environmental & Social Management System.

2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B operation according to IDB Invest's Environmental and Social Sustainability Policy since it will likely generate, among others, the following impacts: a) Increase in occupational health and safety ("OHS") risks due to the construction and operation of the BESS Project; b) life and fire safety ("L&FS") risks during the operation of the BESS; and c) generation of hazardous waste at the end of the batteries' life cycle.

These impacts are deemed to be of medium intensity and can be mitigated via measures that are available and feasible to implement in the context of the proposed operation. The Performance Standards ("PS") triggered by the Project are i) PS1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS2: Labor and Working Conditions; iii) PS3: Resource Efficiency and Pollution Prevention; and iv) PS4: Community Health, Safety, and Security.

3. Environmental and Social Context

The BESS will be installed within the existing Plant¹, located in El Pedregal county – municipality of El Rosario, department of La Paz, El Salvador, approximately 1.55km east of the El Salvador international airport.

¹ The Plant consists of two PV power plants Antares and Spica PV plants, with a nominal peak power of 75.4MWp and 25.4MWp, respectively. The PV plants, partially financed by IDB, started operating in 2017.

The Project site is in a rural/industrial zone located at 6 km south of El Rosario city. People settled in the communities around the Project depend mainly on the agribusinesses activities and work opportunities created in the Zona Franca El Pedregal, a free zone 1.5km from the Plant.

4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

4.1 Assessment and Management of Environmental and Social Risks

4.1.a E&S Assessment and Management System

Providencia's Environmental and Social Management System ("ESMS") includes a series of procedures and management plans developed by either the Company's shareholder ("Neoen") or the Operation and Maintenance (O&M) contractor to prevent or mitigate the environmental and social ("E&S") impacts and risks identified during the operation of the Plant. The Project, however, will adopt such ESMS at the corporate level and update certain procedures to manage the E&S risks of the BESS project.

4.1.b Policy

Neoen has developed an integrated environmental, social, health, and safety ("ESHS") policy aligned with PS-1, but it has not yet been adopted at the Company level.

4.1.c Identification of Risks and Impacts

The BESS's E&S risks and impacts are clearly described in the Project's Environmental Impact Assessment ("EIA") approved by the Ministry of Environment and Natural Resources ("MARN"). The O&M operator has prepared a risk and impacts matrix but limited primarily to the Project's OHS risks.

4.1.d Management Programs

The O&M contractor has documented procedures and protocols to address risks related to the following issues: waste and effluents, water management, OHS, and emergency preparedness and response. Providencia is in the process of developing its own ESMS procedures.

4.1.e Organizational Capacity and Competency

The Plant is managed by an independent O&M contractor that has a designated person to oversee its compliance with the MARN's and IDB Invest's E&S requirements. This person, however, is mostly concentrated in managing OHS risks, and lacks the required expertise in environmental and social-related aspects. At the corporate level, the Company has designated one part-time person to monitor the Project's ESHS aspects.

4.1.f Emergency Preparedness and Response

The Company has developed an emergency preparedness and response plan (“EPRP”) for the Plant’s operation phase. The EPRP, aimed at managing risk scenarios according to local requirements and international best practices, considers emergencies likely to be caused by flooding, earthquakes, volcanic activity, spills, brush fires, and personal accidents, among others. Training for emergency preparedness and response and first aid is provided to the O&M contractor’s employees. The Company, however, will update the EPRP to include an emergency plan specifically for the BESS Project containing general emergency actions to be triggered should a risk materializes. The plan will address the possibility of fire and explosion risk incidents (i.e., battery or cell thermal runaway) specific to BESS systems. Additionally, Providencia will develop a maintenance plan for its L&FS systems which includes procedures for the continuous improvement of such systems.

4.1.g Monitoring and Review

Under the O&M contract, the operator has an obligation to produce monthly reports to the Company covering ESHS aspects of the Plant’s operation. The reports, however, are limited in their scope and, therefore, will be expanded to cover all ESHS aspects.

4.1.h Stakeholder Engagement

Before constructing the Solar PV facility, Providencia carried out a consultation process to disseminate information about the Plant, obtain feedback from the community, and address any community’s environmental and social concerns related to the implementation phase. The consultation process included surveys, interviews with people living in the direct area affected by the Plant, meetings with authorities of the local government, and community leaders and representatives from El Pedregal County. The Stakeholder Engagement Plan during the Plant’s construction was aligned with PS-1 requirements. However, stakeholder engagement is currently limited given that there is no official social liaison officer between the Company or the O&M contractor and the community

4.1.i External Communication and Grievance Mechanisms

The Company has a documented procedure to capture and process external (from the community) and internal (from its workers) complaints and grievances. Through such mechanism the affected communities can submit their complaints, grievances, or suggestions in person at the Plant’s administrative offices, or on-site through the O&M’s ESHS manager. When deemed necessary any complaint or grievance can be escalated to the Company. The External Grievance Mechanism will be updated to i) indicate that claims can be anonymous, ii) establish guidelines for registering, analyzing, categorizing, investigating, choosing alternative solutions, and indicating the deadline for responses; and iii) define how the mechanism will be publicized, so that local communities will know where to go and who to contact when required.

No external complaints have been captures during the last 12 months.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Management of Worker Relationships

4.2.a.i Human Resources Policies and Procedures

Even though Providencia has not yet developed and implemented a Human Resources Policy, the O&M contractor has developed a policy that complies with PS-2 guidelines and the local legislation.

4.2.a.ii Working Conditions and Terms of Employment

Providencia has 16 employees, all of which are contractor staff. The workforce required during the peak of the Project's construction is expected of 30 people.

4.2.a.iii Workers' Organizations

Even though Salvadorian labor laws protect workers' right to form or join trade unions, participate in collective bargaining agreements, and go on strike, currently, there are no workers unions nor associations within Providencia or its contractors.

4.2.a.iv Non-discrimination and Equal Opportunity

Providencia is a company that provides equal opportunities to all its employees, regardless of their gender, race, national origin, language, religion, disability, or health condition.

4.2.a.v Retrenchment

The Company does not have any plans to reduce its workforce in the future.

4.2.a.vi Grievance Mechanism

Internal complaints are verbally managed on-site by the O&M contractor and reported on a case-by-case basis to the Company. No internal complaints have been registered during the last 12 months.

The internal grievance mechanism procedure will be updated to i) establish guidelines for registering, analyzing, categorizing, investigating, choosing alternative solutions, and indicating the deadline for responses; ii) allow anonymous complaints, iii) stipulate that there will be no reprisals for complainants, iv) guarantee the confidentiality of the complainant and iv) define how the mechanism will be communicated to employees so they know where to go and who to contact when required.

4.2.b Protecting the Workforce

The ESDD process did not identify the existence of child labor or forced labor.

4.2.c Occupational Health and Safety

OHS risks for the Plant's operation are adequately identified under a risk matrix developed by the O&M contractor. Providencia's OHS Management Program was developed for the Plant's construction phase. Therefore, it will be updated for its operation phase and to incorporate risks linked to the BESS's operation and maintenance.

The O&M contractor provides regular OHS training to its employees. During 2020, Providencia's training plan included the following topics: solid waste management, Covid-19 protocols, and occupational risks. No incidents nor accidents have been reported since the end of the Plant's construction phase.

Civil works needed for the BESS installation are simple. They consist of flattening the area to be intervened and casting over concrete slabs to lodge the equipment that will be installed. The construction company in charge of these tasks will develop an OHS plan for the civil works and assembly following applicable Salvadorian legislation.

4.2.d Supply Chain

Commercial lithium-ion batteries, such as those that comprise the BESS Project, rely on cathodes containing cobalt, a rare metal mined in countries where often children have been found working. The ion-lithium batteries of Providencia's BESS will be purchased from a supplier that uses blockchain technology through collaboration with global companies to prevent the use of minerals that have the possibility of human rights abuses, such as child labor, in the cobalt production process.

4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

4.3.a.i Greenhouse Gases

The construction of the BESS will generate emissions of gases such as NO_x, SO_x, and CO_x associated with the use of vehicles and machinery required during the construction phase. Greenhouse gas emissions during the construction period are expected to be for a short period and will be non-material. Providencia utilizes small quantities of Sulfur Hexafluoride (SF₆) as an insulating gas in the high voltage switchgear.

4.3.a.ii Water Consumption

The water utilized by Providencia for panel cleaning and human consumption is supplied by trucks provided by a company authorized by the National Administration of Aqueducts and Sewers ("ANDA"). Water consumption during 2020 was of approximately 320 m³, lower than the maximum of 916 m³ authorized by ANDA. The battery cooling system uses demineralized water purchased from a third party, which is added at the time of battery installation and recirculated in a closed-circuit during battery operation.

4.3.b Pollution Prevention

During the BESS construction, the Company will generate particulate matter (PM₁₀ and PM_{2.5}), vibrations, and sediments. These are expected to be non-material and for a short period.

4.3.b.i Wastes

The main source of wastewater generation in Providencia is the sanitary facilities installed in the Plant. Such water is conducted to four septic tanks which are cleaned at least once per year by a company duly authorized to transport and treat the wastewater.

The domestic solid waste generated by the Company is stored and labeled at the Project site before being collected twice a week by a licensed company. Recyclable waste (metal, cardboard) is usually donated.

Providencia currently produced small quantities of hazardous waste (oiled soils, rags with grease and oil, and contaminated containers), which are stored and then collected and disposed by management company authorized by the MARN.

Damaged PV panels are stored in the plant, on pallets, and covered with plastic. Providencia currently does not have procedures for the final disposal for damaged PV Panels.

4.3.b.ii Hazardous Materials Management

Providencia handles hazardous materials (fuels and oils, transformer oil and SF₆) in minimal quantities used in electrical protective devices and stored in sealed compartments.

4.3.b.iii Pesticide Use and Management

Providencia does not use herbicides in the Plant as vegetation control is done manually.

4.4 Community Health, Safety and Security

4.4.a Community Health and Safety

The L&FS systems in the Plant have been designed to comply with current local Salvadorian regulations and international best practices. The local fire authorities have assessed, approved and issued the corresponding permits for the Plant's systems, including the associated substation and server shed buildings. The L&FS systems (extinguisher's, brush-fire backpack systems, portable water tanks, fire detection and suppression, etc.) appear to be well maintained and in good operational conditions. However, the Company will improve the reliability of its L&FS systems by: ii) installing a BESS emergency shutdown system; and iii) improving the areas near the BESS by adding protective signage and large capacity fire extinguishers.

4.4.b Security Personnel

The Plant site is fenced and patrolled by an armed security force subcontracted by the O&M contractor. The security contract between the O&M contractor and the security firm provider includes the obligation for the private security provider to comply with The Voluntary Principles on Security and Human Rights² and to ensure that security personnel is trained in accordance with such principles.

4.5 Land Acquisition and Involuntary Resettlement

The BESS Project does not require any land acquisition, nor will it involve involuntary resettlement, as it will be developed within the premises of the existing Plant.

4.6 Biodiversity Conservation and Natural Habitats

The BESS will be built in a highly modified area where there are no species requiring special care.

4.7 Indigenous Peoples

The Project will not affect any indigenous peoples.

4.8 Cultural Heritage

There are no signs of archaeological remains or vestiges at the Project site. However, Providencia will develop a Chance Find Procedure to be adopted by the company constructing the BESS.

² <https://www.voluntaryprinciples.org/the-principles/>

5. Additional Information

For questions about the Project contact Providencia Solar S.A. de C.V.

Name:	Paolo Cartagena
Title:	Managing Director Neoen El Salvador
Phone number:	+503 2263-1292
Email:	paolo.cartagena@neoen.com

For questions and comments to IDB Invest, contact:

Name:	Grupo de Comunicación de BID Invest
Email:	requestinformation@idbinvest.org

In addition, as a last resource, affected communities can access IDB Invest's Independent Consultation and Investigation Research (ICIM) in the following way:

Phone number:	+1 (202) 623-3952
Fax number:	+1 (202) 312-4057
Address:	1300 New York Ave. NW Washington, DC. USA. 20577
Email:	mecanismo@iadb.org o MICI@iadb.org