

ENVIRONMENTAL AND SOCIAL STRATEGY (ESS)¹

I. PROJECT DESCRIPTION

- 1.1** The project consists of the construction, operation and maintenance of a 25 megawatt peak (MWp) solar photovoltaic (PV) power project and its associated facilities (the “Project”)² located in the Tarapacá region of Chile (See Figure 1). The Project has been divided into two plants, Pozo Almonte 2 and Pozo Almonte 3, located in two rectangular project areas of approximately 52 hectares and 126 hectares (see Figure 2). The Project will be connected to the national grid and will be Chile’s largest solar PV project when it comes on line in late 2013.
- 1.2** The Borrower will be a special purpose company created under Chilean law for the construction and operation of the Project. The Borrower will be owned by a subsidiary of SolarPack Corporacion Tecnologica, S.L (the “Sponsor”). The Project Team seeks eligibility for an A Loan of approximately \$20 million (25 percent of the total project cost). The remainder of the financing is expected from the Canadian Climate Fund for the Private Sector in the Americas (C2F), an export credit agency, other multilateral development banks and/or commercial banks.
- 1.3** The Project encompasses the installation or construction of the following components: i) erection of approx. 86,000 solar photovoltaic panels with a combined capacity of 25 MWp; ii) construction of two, 13.8 kV transmission lines (length and alignment to be verified during due diligence), to connect the solar facilities to the national grid; iv) several smaller underground electrical lines within the project area; and v) construction of maintenance and service roads (length and alignment to be verified during due diligence) exiting the highway and within the solar facilities.
- 1.4** Construction activities have an expected duration of approximately 8 months with a workforce at the two facilities of 60 workers and 110 workers; three workers will remain at each facility during the operations phase.

II. INSTITUTIONAL AND REGULATORY CONTEXT

¹ This Environmental and Social Strategy (ESS) is being made available to the public in accordance with the Bank's Policy on Disclosure of Information. The ESS has been prepared based primarily upon information provided by the project sponsors and does not represent either the Bank’s approval of the project or verification of the ESS’s completeness or accuracy.

² The inclusion of the 1 MW Calama Project will be reviewed during due diligence.

- 2.1** The legal and regulatory framework of Chile for the energy sector was established by the 1982 Electric Services Law. Under that framework, electricity generation, transmission and distribution activities are carried out by the private sector. The participation of the Government is limited to regulatory, enforcement, supervisory and subsidiary roles. Tariffs must reflect real costs of generation, transmission and distribution to provide accurate market signals for optimal development of the electric system. Generating companies can commercialize energy in three markets: a) large customers at freely negotiated prices; b) distribution companies through regulated PPAs, following a bidding process and, c) in the spot market at a marginal cost per kilowatt-hour calculated by the Centro de Despacho Económico de Carga (CDEC). Priority of dispatch in the spot market is given to the lowest marginal cost energy, thereby favoring renewable energy resources which have no fuel costs.
- 2.2** In 2008, Chile passed a law to promote Non-Conventional Renewable Energy (NCRE). Law 20.257 provides that companies with power generation capacity of 200MW or more should use NCRE for at least 10% of their electricity use by 2024.
- 2.3** Law No. 19.300 Ministerio Secretaria General de la Presidencia sobre Bases Generales del Medio Ambiente (9 March 1994), Articles 5-11 (except 7) allow projects determined to have minimal environmental and social impacts to be exempt from preparing an Environmental Impact Assessment (EIA) for the project. These projects must prepare and present a Declaración de Impacto Ambiental.
- 2.4** Separate Declaraciones de Impacto Ambiental (DIAs) for the Pozo Almonte 2 and Pozo Almonte 3 solar plants were presented to the República de Chile Comisión de Evaluación on 21 December 2010. The Pozo Almonte 2 and Pozo Almonte 3 projects were approved on May 6, 2011 and May 30, 2011, respectively by the Comisión de Evaluación de la I Región de Tarapacá.
- 2.5** The Project triggers the following directives of IDB's OP-703 Environmental and Safeguards Policy: B.2, Country Laws and Regulations; B.3, Screening and Classification; B.5, Environmental Assessment Requirements; B.6., Consultations; B.7, Supervision and Compliance; B.9 Natural Habitats and Cultural Sites; and B.15 Co-Financing Operations. The OP-102, Disclosure of Information Policy also applies for this Project. Based on available documentation, it is not expected that OP-710 on involuntary resettlement and OP-765 on indigenous peoples will be triggered for this Project. However, the Due Diligence will examine if land acquisition or economic displacement will occur in relation to the Project. Based on available information, the Project had been classified by the Bank as a Category B operation.

III. ENVIRONMENTAL AND SOCIAL SETTING

- 3.1** Based on available project documentation, the solar facilities will occupy a maximum area of approximately 178 ha (52 ha and 126 ha) which will be permanently affected by the erection of the solar panels, substation, offices, maintenance roads and other construction works. Based on aerial imagery, much of the terrain surrounding the Project area has already been impacted by human activities, particularly mining and off-road vehicle use. The landscape appears to be mostly composed of uninhabited desert. Due Diligence will investigate the potential impacts to the area from the placement of the solar facilities.
- 3.2** The project areas lie approximately 3.6 km east of the city of Pozo Almonte, the closest city. There does not appear to be any households, schools or other infrastructure located within the Project area. Residents in the local community will be interviewed during the Due Diligence process to gauge the effectiveness of the consultation process and gain an understanding of the local resident's perceptions of the Project.
- 3.3** Currently, there is no precise information available on the scale of economic activities occurring within the project area and surrounding community, such as agricultural activities or cattle grazing and therefore, it is not certain if any economic displacement will occur. There is no indication in the documentation that affected people have been consulted on the Project, which will be investigated during the Due Diligence.
- 3.4** The existing environmental documentation does not identify any sensitive habitats in the area, nor any sensitive or protected species of flora or fauna; however, there is a lack of available ecological baseline information. The Due Diligence will verify that no sensitive species or habitats exist in the Project area. Several sites of cultural importance do exist in the area, and the significance of potential adverse impacts on those sites will be further assessed during the due diligence.

IV. KEY POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS

- 4.1** Potential environmental impacts and risks associated with solar facilities during the construction phase are mainly linked to the installation of the solar panels, foundations, and transmission line as well as the substation and access roads. Main construction impacts are: (i) habitat disturbance; (ii) soil erosion; (iii) dust generation; (iv) increased heavy traffic; (v) loss of vegetation and; (vi) occupational health and safety hazards for the workforce. Of specific importance for the Pozo Almonte project, may be the risk of encountering archeological sites or artifacts during construction or disturbing known sites, the risk of temporarily affecting the livelihoods of communities, and safety issues arising from increased traffic.

- 4.2** Once in operation, main impacts and risk associated with solar facilities are: (i) loss of vegetation; (ii) accidental discharges of hazardous materials; (iii) community health and safety hazards; and (iv) water consumption.
- 4.3** The Due Diligence will determine with more certainty the extent of anticipated impacts of the Project. It is expected that the Borrower will apply mitigation measures that correspond to best industry practices for the solar power sector.

V. ENVIRONMENTAL AND SOCIAL DUE DILIGENCE STRATEGY

- 5.1** Based on the requirements outlined in IDB's OP-703 Environmental and Safeguards Compliance Policy, the Team proposes that the Pozo Almonte Solar Power Project be classified as a Category B.
- 5.2** The Bank will perform an Environmental and Social Due Diligence ("ESDD") in order to confirm that all of the Project's relevant impacts and risks have been, or will be, properly and adequately evaluated, and mitigated.
- 5.3** The ESDD will specifically address the following aspects:
- a.** Determine if additional flora and/or fauna surveys should be conducted to gather baseline data;
 - b.** Investigate the potential impacts of the transmission lines, provided more details on their locations;
 - c.** Assess potential adverse socio-economic impacts of construction activities such as temporary, or permanent, loss of access to agricultural or grazing lands for farmers and herders;
 - d.** Assess the adequacy and timely consultation and information dissemination process with affected parties of the current project (note that there is no mention of any public consultation activities in the available documentation in addition to the consultation conducted by Comisión de Evaluación de la I Región de Tarapacá as part of the process under 2.4);
 - e.** Ensure the implementation of a Chance Find Procedure as recommended in the Archaeological Study;
 - f.** Assess the adequacy of the Traffic Plan to ensure road safety is maintained despite the temporary increase in traffic, particularly heavy trucks and equipment through small communities;
 - g.** Assess the adequacy of the health and safety procedures of the company;

- h.** Review the Environmental and Social Management Plan (ESMP) to ensure the avoidance, minimization, and mitigation of any potential impacts;
 - i.** Determine if the Project has been developed and implemented in compliance with the environmental laws and regulations of Chile;
 - j.** Assess the Project's compliance with IDB's Environmental and Safeguards Compliance Policy (OP-703) and if needed develop an Action Plan in order to resolve any observed non-compliance.
- 5.4** An Environmental and Social Management Report (ESMR) will be prepared by the Project Team as part of the ESDD to analyze the management of the environmental and social aspects of the project.

Figure 1. General Location Map

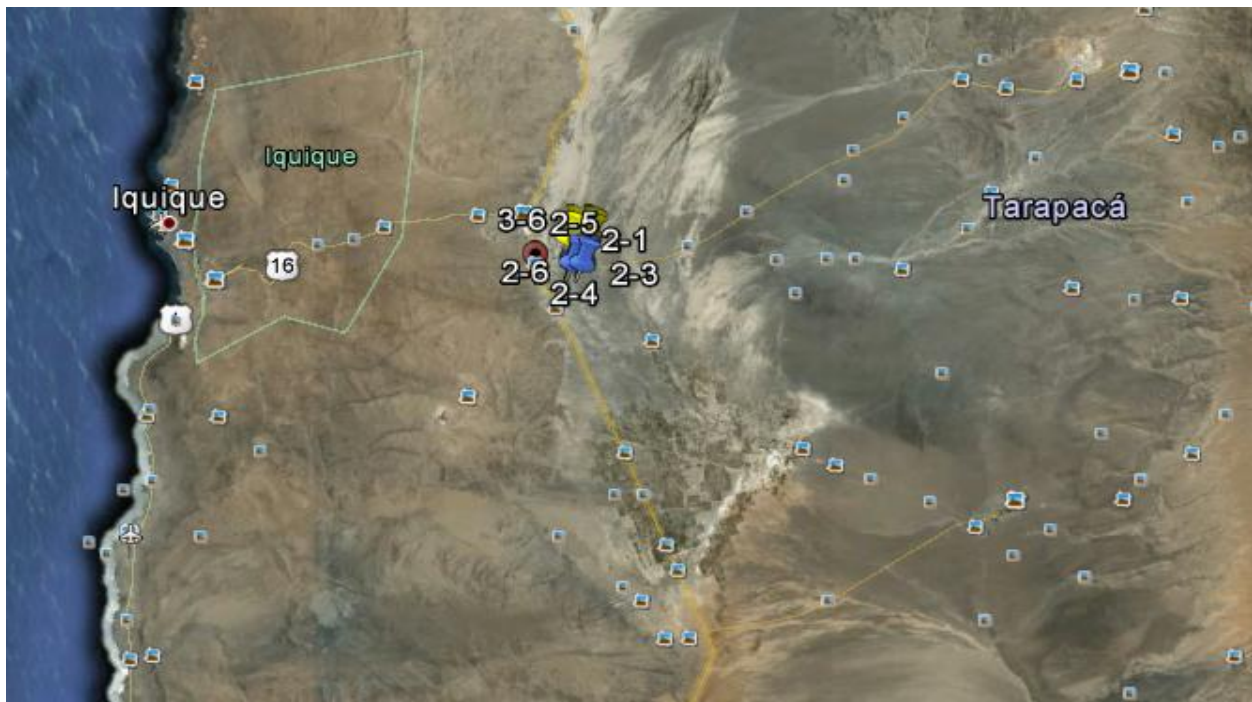


Figure 2. Project Location Map

