

ENVIRONMENTAL AND SOCIAL STRATEGY (ESS)

Campo Palomas Wind Power Project – Uruguay

I. SUMMARY

Country:	Uruguay
Sector:	Renewable Energy
Project Name:	Campo Palomas Wind Project
Project Number:	UR-L1104
Borrower:	Nicefield S.A.
Sponsor:	Teyma Sociedad de Inversión S.A and Instalaciones Inabensa S.A
Proposed IDB Loan:	Up to US\$ 70 million

II. PROJECT DESCRIPTION

- 2.1** Nicefield S.A., the Borrower, is seeking financing from the IDB for the construction, operation and maintenance of a 70 MW wind farm (Parque Eólico Santa Rita) and its associated facilities to be constructed in the colonies of Santa Rita y Campo Palomas, a zone of high wind potential, in the Departamento de Salto, Uruguay. The wind concession area lies approximately 18 km north of Ruta Nacional No. 31 (coordinates -31.170716, -57.567693) and the closest towns are Saucedo and Palomas, respectively located 5.7 km and 7.8 km north of the concession area (see Figure 1).
- 2.2** The Project encompasses the installation or construction of the following components: i) installation of 35 wind turbines (Vestas V-110) with a nominal capacity of 2 MW each; ii) construction of a substation; iii) construction of a 6km (150 kV) transmission line (see Figure 2); iv) underground transmission lines within the wind concession area; v) construction of support buildings; and vi) construction of internal maintenance and service unpaved roads (approximate width is 7m and total length will be determined during due diligence) within the wind concession.

III. INSTITUTIONAL AND REGULATORY CONTEXT

- 3.1** Uruguay Law 16.466/1994 Law of Environmental Impact Evaluation and Decree 345/2005 classify projects and define the degree of environmental impact evaluation required by projects. Under these regulations, the Santa Rita project has been classified as a Category B project and requires an Environmental Impact Assessment (EIA). The Dirección Nacional de Medio Ambiente (DINAMA) in Montevideo, granted the Viabilidad Ambiental de Localización (VAL) for the Santa Rita Project on 07 February 2011 following a review of the required environmental documentation. The Project was classified as a Category B project by DINAMA. The environmental licenses for the project are pending. The EIA for Santa Rita project has not been prepared. Therefore, this ESS is based on the information presented in the VAL. Once completed, the EIA will be provided to the Bank for review and

approval. The compliance with national regulations will be verified during the due diligence.

- 3.2** The Project triggers the following directives of IDB's OP-703 Environmental and Safeguards Policy: B.1, Bank Policies; B.2, Country Laws and Regulations; B.3, Screening and Classification; B.5, Environmental Assessment; B.6., Consultation; B.7, Supervision and Compliance; B.9 Natural Habitat; B.10, Hazardous Materials; B.11, Pollution Prevention; and B.15 Co-Financing Operations. The OP-702, Disclosure of Information Policy also applies for this Project. Based on available documentation, it is not expected that OP-710 on Involuntary Resettlement will be triggered for this Project. However, the applicability of OP-710 will be thoroughly evaluated during the Due Diligence by: (i) examining any land lease / land use agreements or negotiations with land owners in the concession area; (ii) the land acquisition agreements required for the right-of-way of the transmission line; and (iii) if there is a possibility of resettlement or economic displacement caused by the Project. Based on available information, the Project has been classified by the Bank as a Category B operation.

IV. ENVIRONMENTAL AND SOCIAL SETTING

- 4.1** According to the VAL, the Parque Eólico Santa Rita wind concession covers an area of approximately 4,000 ha. Much of the wind concession area has already been impacted by human activities such as cattle grazing and forest plantations. Key areas considered as natural habitats exist within and bordering the wind concession area, consisting of various biomes including: forested areas, riverine forests, riparian areas and grassland prairies. The site is crossed by two arroyos Palomas Grande and Itapebí and the ravine Sarandí. According to the VAL, the primary economic activities occurring within the wind concession area include extensive agricultural activities. A few other economic activities occur in the area on a much smaller scale such as forest plantations.
- 4.2** The concession area is located between two large Important Bird Areas (IBA), Arapey (UY002) approximately 6 km north, and San Antonio (UY004) approximately 15 km southeast of the Project area (see Figure 3). Three other IBAs are located nearby, Corralitos and Artigas located at approximately 41 and 46 km, respectively, to the southeast of the site; and Campos de El Tapado at approximately 52 km southeast of the site. According to the information reviewed, there are no protected areas included in SNAP and the closest ones were identified at 90km from the site. The Team will investigate during Due Diligence the potential impacts to these areas from the placement of any nearby turbines.
- 4.3** No bird or bat studies have been conducted at the Project Site. According to the VAL, the baseline study for birds and bats is currently the subject of a call of tender. Information reviewed for the UY002 and UY004 IBAs revealed that several of the species present within these IBAs are listed on the IUCN Red List as endangered, near threatened, or vulnerable. These species include: *Gubernatrix cristata*, *Sporophila palustris*, *Sporophila*

ruficollis, *Anthus nattereri* and *Sporophila cinnamomea*. The due diligence will investigate if those species frequent the area of the proposed Project. A bird and bat assessment will have to be developed during the EIA process taking into account seasonal migration.

- 4.4** The VAL identifies the general area of Salto as having a high archaeological value. The presence of archaeological zones within the project's area of influence will be confirmed during the Due Diligence. Should the Project Site contain archaeological items of potential value to cultural heritage, according to Uruguayan regulation, an Archaeological Impact Study will be required and submitted to the Comisión del Patrimonio Arqueología del Ministerio de Educación y Cultura for their approval. The Bank will require a Chance Find Procedure prior to start of construction.
- 4.5** The project lies about 5.7 km south of the town of Salcedo, with 270 inhabitants, and 7.8 km south of Palomas, with 88 inhabitants. There are several existing households nearby the Project area. According to the VAL the closest residence is located 350 m from the closest proposed turbine (see Figure 4). A noise study will be required to identify potential impacts from noise levels during construction and operation.

V. KEY POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS

- 5.1** Potential environmental impacts and risks associated with wind farms during the construction phase are mainly linked with the erection of the wind turbines, the installation of the transmission line, the substation and access roads. Main construction impacts are: (i) habitat disturbance; (ii) soil erosion; (iii) dust generation; (iv) increased heavy traffic; (v) noise; (vi) loss of vegetation and; (vii) occupational health and safety hazards for the workforce. Potential impacts for the Project include: impacts to the riverine habitat and risk of flooding near the Arroyos Paloma Grande and Itapebí, temporarily impacts to agricultural activities during construction. Given the nature of the habitat within most of the wind concession area, impacts to fauna and flora during construction are not expected to be significant. However, the due diligence will determine the presence of any species of concerns and sensitive micro-habitats within the concession. These impacts will be temporary and of small magnitude and can be minimized and mitigated by adhering to best industry practices.
- 5.2** Once in operation, main impacts and risk associated with wind farms are: (i) birds collision; (ii) bats collisions and barotraumas incidents; (iii) loss of vegetation; (iv) accidental discharges of hazardous materials; (v) community health and safety hazards; (vi) the risk of flooding near the Arroyos Paloma Grande and Itapebí; (vii) noise impacts caused by the wind turbines.
- 5.3** The due diligence will determine with more certainty the extent of anticipated impacts of the Project. Based on available documentation, the significance of impacts should be minor to moderate. It is expected that the Borrower will apply mitigation measures that corresponds to best industry practices for the wind power sector.

VI. ENVIRONMENTAL AND SOCIAL DUE DILIGENCE STRATEGY

- 6.1** Based on the requirements outlined in IDB's OP-703 Environmental and Safeguards Compliance Policy, the Team proposes that the Santa Rita Wind Power Project be classified as a Category B.
- 6.2** 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.
- 6.3** The ESDD will specifically address the following aspects:
 - a.** Review the final layout of the wind farm and determine if the buffer between the turbines and the households meets Uruguayan regulation; assess potential noise impacts to households;
 - b.** Determine if land acquisition for the right of way for the transmission line had been secured and if appropriate compensation was offered to landowners;
 - c.** Once available, review the EIA and determine if additional baseline studies are required;
 - d.** Review of the Environmental and Social Management Plan (ESMP), to avoid, minimize, and mitigate any potential impacts especially on terrestrial areas that could be considered a natural habitat for endangered species;
 - e.** Determine if bird populations present in the bordering IBAs will be impacted by the Project activities (with a specific attention to those with a conservation status of interest per the IUCN Red List);
 - f.** Evaluate any potential adverse impacts on terrestrial ecosystems and semi-aquatic and their respective habitats as a result of construction activities i.e. transmission line, wind turbines; and maintenance and service roads;
 - g.** Assess potential adverse socio-economic impacts of construction activities such as temporary loss of access or use of lands for cattle herders and farmers and impacts of the right of way for the transmission line;
 - h.** Assess on the adequacy and timely consultation and information dissemination process with affected parties of the current project;

- i.** Evaluate the implementation of a chance-find procedure;
- j.** Determine if the Project has been designed and carried out in compliance with environmental law and regulations of Uruguay. Written evidence of the acceptance of the EIA and issuance of the environmental license will be sought;
- k.** An evaluation, and further development as necessary, of Project execution monitoring and supervision procedures to ensure proper implementation of environmental, social, health, safety and labor actions and requirements;
- l.** Assessment of the Project's compliance with all relevant laws, regulations, and safeguards directives of the IDB's Environment and Safeguards Compliance Policy, and development of an Action Plan for the timely resolution of non-compliances;

6.4 An Environmental and Social Management Report (ESMR) will be prepared by the Project Team as part of the environmental and social due diligence to analyze the management of the environmental and social aspects of the project.