INTER-AMERICAN DEVELOPMENT BANK

URUGUAY

CASA BLANCA and GIACOTE SOLAR PHOTOVOLTAIC POWER PROJECT (UR-L1100)

Category B Project

Environmental and Social Management Report (ESMR)

JANUARY 2015

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I. INTRODUCTION

A. Summary Table

1.1

Country	Regional / Uruguay
Sector	Renewable Energy
Project Name	Casa Blanca and Giacote Photovoltaic Power Project
Borrower	Three Uruguayan Special Purpose Companies
Sponsor	Sky Solar Holdings, Ltd.
Transaction Type	Project Finance
Total Project Cost (in US Dollars)	Approximately US$129.2 million
IDB A-Loan (if applicable)	Up to US$51 million
Co-lenders	Commercial Bank (US$25.5 million) Canadian Climate Fund (US$10 million)
Environmental Category	B
Project Team	Ana Maria Vidaurre, Project Team Leader (SCF/INF), Ivan Nunez (SCF/INF), Juan Paredes (INE/ENE), Jan Weiss (SCF/SYN), Steven Collins (VPS/ESG) and Andre Averbug, (SCF/PMU); Jean-Marc Aboussouan (Chief, SCF/INF)

B. Background

1.2 The project consists of the construction, operation and maintenance of six solar photovoltaic (PV) power project totaling 69.4 megawatts (MW), as well as its associated facilities, including internal, underground medium-tension collection lines, short, medium-tension above ground evacuation lines and substations. The Project is divided into two subprojects, the Giacote Project and the Casa Blanca Project. The 30.6 MW Giacote project will consist of the 20.4 MW Young facility and the 10.2 MW Arapey facility; the 38.7 MW Casa Blanca project will consist of four facilities including: Dicano (11.5 MW); Fenima (9.5 MW);

Petilcoran (9.5 MW) and; Raditon (8.2 MW). Dicano, Fenima and Petilcoran are located on the same plot of land with five other small solar facilities, not included in the financing. This group of eight projects is referred to a Bola de Oro.

1.3 The Young project will be located in the north-central portion of Uruguay in the Department of Rio Negro, approximately 20 km northeast of the City of Young (See Figure 1). The facility will be constructed on a single parcel owned by a single individual. The parcel is approximately 142 hectares, of which, the project will occupy a total area of approximately 81 hectares of cattle grazing land (see Figure 2).

1.4 The Arapey project will be located in northern Uruguay in the Department of Salto approximately 15 kilometers from the City of Termas de Arapey and 28 km from the actual hot springs Termas de Arapey (see Figure 3).

1.5 The Casa Blanca Project will be located in Paysandú department, Western Uruguay. Specifically, Raditon will be constructed 10 km to the south of the city of Paysandú, and Dicano, Fenima and Petilcorán (these three Plants share the same plot) will be constructed approximately 5.5 km to the northwest of the city of Paysandú. The project sites were previously used for the cultivation of soy; surrounding properties are also dedicated to agricultural production with soy being the primary crop.

1.6 The Government of Uruguay ("GoU") issued Decree 133/013 in May 2013, seeking to promote solar power generation. The Decree facilitated the signing of purchase agreements ("PPAs") between the Administración Nacional de Usinas y Transmisiones Eléctricas ("UTE" or the "Offtaker"), and private solar generators.

1.7 Following a competitive bidding process, Sky Solar Holding Co. (the "Sponsor") and Lafemir S.A (together, the "Shareholders") were awarded in August 2012 and August 2013 a set of 32 year PPAs for the development of four projects, all under 12MW (the "Casablanca Projects"), and two 30 year PPAs for the development of two additional projects of 24.0MW and 12.0MW respectively (the "Giacote Projects"). The Project was originally designed with a total generation capacity of 74.2MW, but has since been reduced to 69.4 MW. Additionally, the Bank seeks to support the group of projects under two separate loan agreements; the Giacote Project and the Casa Blanca Project. Both projects will sell all the energy generated to UTE.

1.7 The estimated total cost of the Projects (Giacote and Casa Blanca) is approximately US$129.2 million, which will be funded through a combination of equity and debt, along with loans from IDB and the Co-Lenders. The Project is seeking financing of up to US$51 million from the IDB and approximately US$10 million from the Canadian Climate Fund for the Private Sector in the Americas (C2F), a fund established by the Government of Canada and managed by IDB to catalyze increased private sector investment in climate change mitigation and adaptation and US$25.5 million from a commercial bank.

1.8 A due diligence mission was conducted by an ESG representative, Steven Collins, from September 15-17, 2014. Findings and observations gained during the mission along with information provided in the project's environmental documentation are detailed within this report.

Figure 1. General Project Location - Young

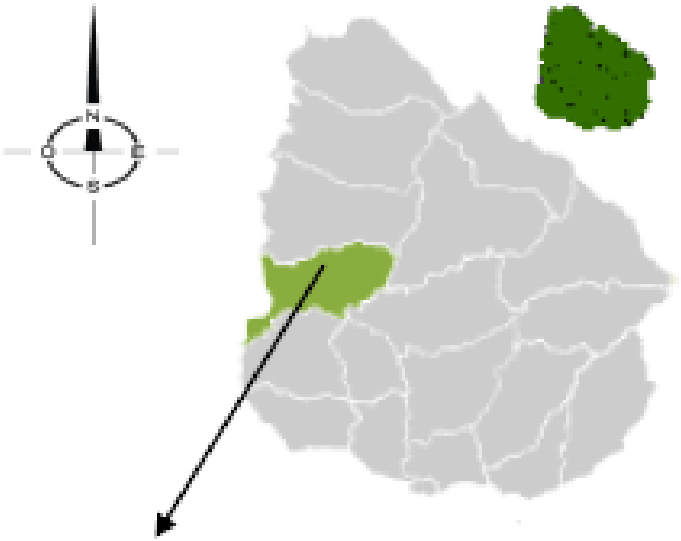

Figure 2. Project Area Map – Young

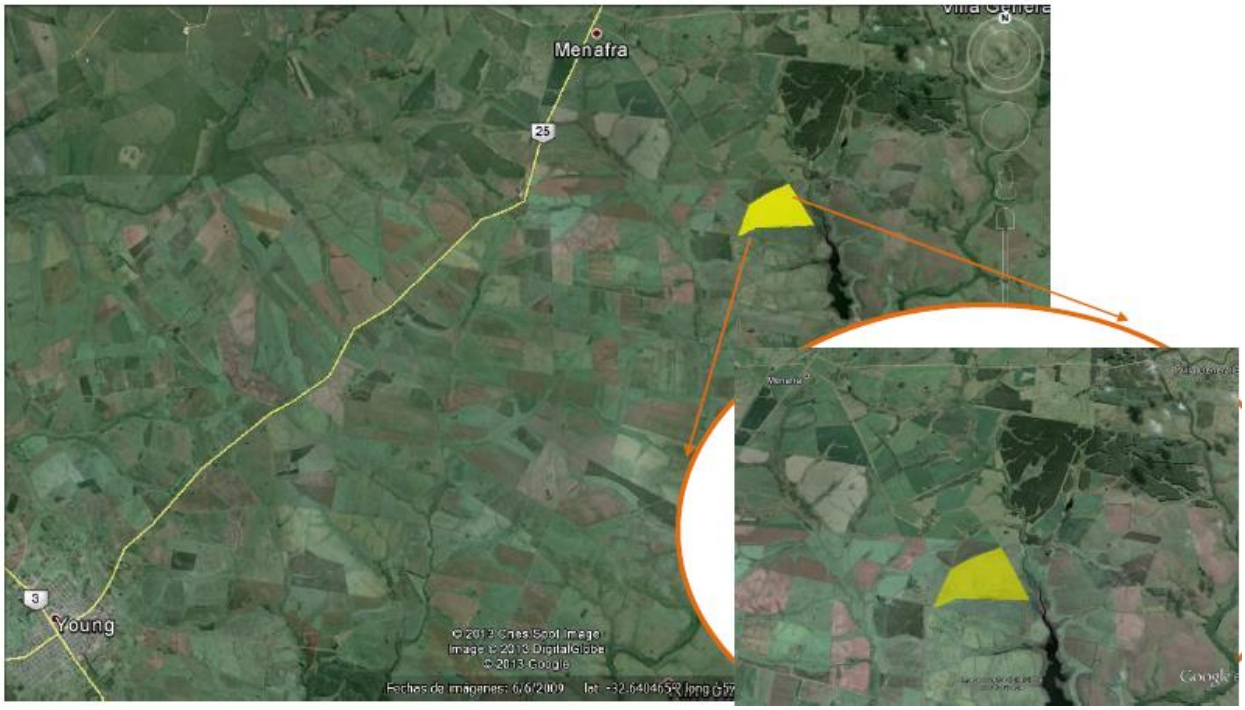

Figure 3. General Project Location - Arapey

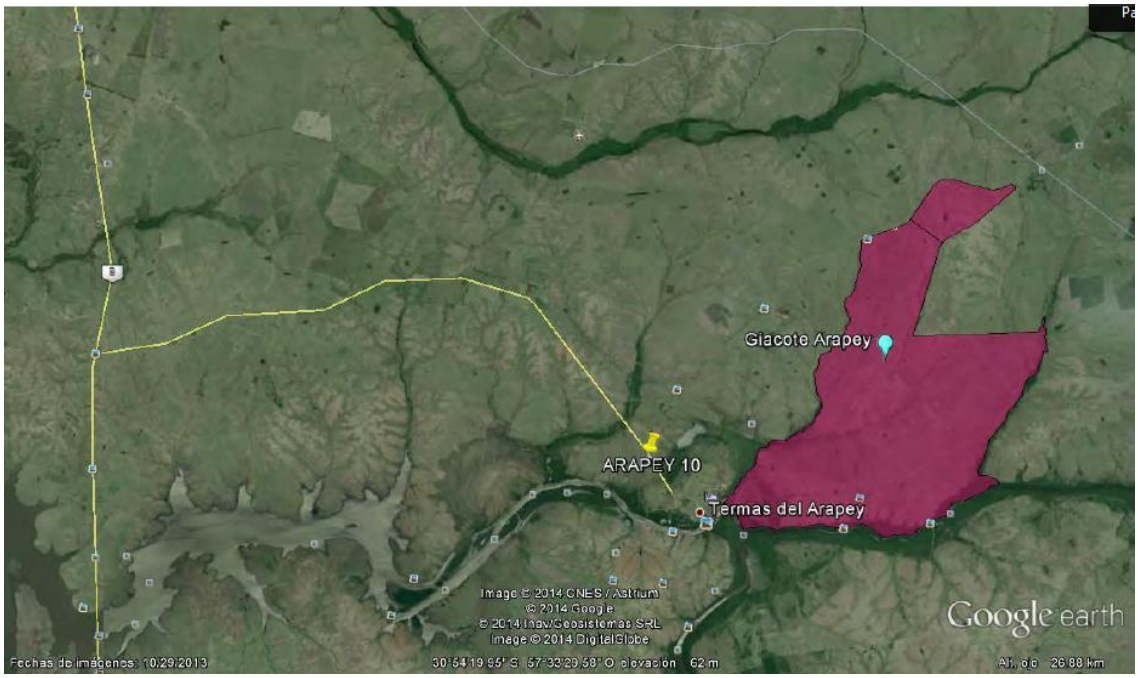

Figure 4. General Project Location – Dicano, Fenima, and Petilcoran

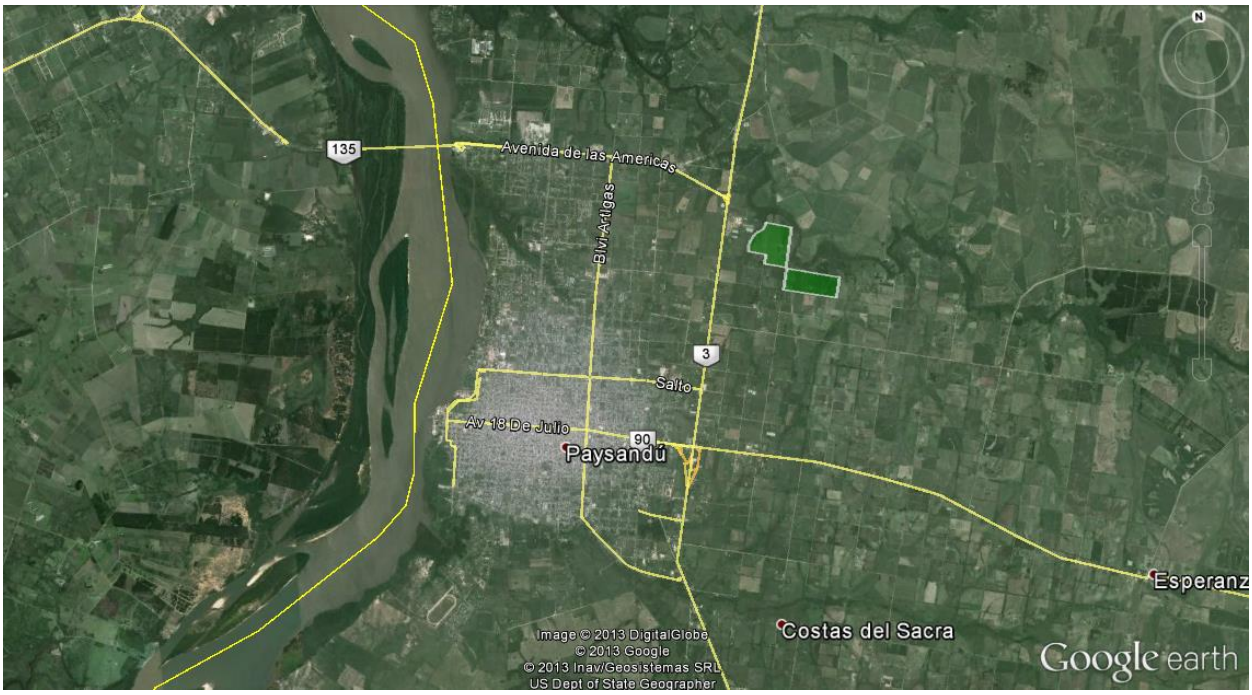

Figure 4. General Project Location – Raditon

II. PROJECT DESCRIPTION

A. Project Components

2.1 The "Project" consists of the construction, operation and maintenance of six solar photovoltaic (PV) power projects, totaling 69.4 megawatts (MW), as well as their associated facilities, including transmission lines, substations, and road construction and improvement (the "Project") in northern Uruguay (see Figure 1). The projects include: Dicano (11.5 MW); Fenima (9.5 MW); Raditon (8.2 MW) and; Petilcoran (9.5 MW) (known as the "Casa Blanca Projects") as well as Young (20.4 MW) and Arapey (10.2 MW) (known as the "Giacote Projects"). The plants will be located in the surroundings of the Paysandú, Young and Salto municipalities, in the Paysandú, Rio Negro and Salto departments, respectively.

2.2 The Young project is located in the Department of Rio Negro, approximately 20 km northeast of the City of Young. The parcel is approximately 142 hectares of cattle grazing land, of which, the project will occupy approximately 81 hectares. The remaining 61 hectares are comprised of drainages and a low-lying area susceptible to inundation, containing a small lake throughout most of the year. The Project will be connected to the national grid via an approximately 16 km, 31.5 kV medium tension above-ground transmission line to an existing substation. The transmission line will parallel an existing road and will not require any land appropriation.

2.3 The Arapey project is located in the Department of Salto approximately 15 kilometers from the City of Termas de Arapey and 28 km from the actual hot springs Termas de Arapey. The project will occupy approximately 30 hectares, a small portion of the total 200 ha parcel currently used for sheep grazing. A new substation will be constructed on the project site in order to connect the project to the national grid at an existing substation 5 km away through an existing 31.5 kV line.

2.4 The four Casa Blanca sites are located in Department of Paysandú. Raditon will be constructed 3.6 km to the northeast of the city of Casa Blanca in an existing industrial site, and Dicano, Fenima and Petilcorán, which share the same plot, will be constructed approximately 5.5 km to the northwest of the city of Paysandú. The project sites were previously used for brick production in the case of Raditon (the brick production continues on a neighboring property not purchased by the Project) and for the cultivation of soy in the other three properties; surrounding properties are also dedicated to agricultural production with soy being the primary crop.

2.5 The Projects have a minimum anticipated life span of 30 years and have already signed multiple PPAs with the Administración Nacional de Usinas y Transmisiones Eléctricas ("UTE" or the "Offtaker"), the state-owned public utility of Uruguay. A set of 32-year PPAs were signed in August 2012 for the development of the four Casa Blanca Projects. In August 2013, two 30-year PPAs were signed for the two Giacote projects.

2.6 Both the Young and Arapey projects will be constructed on single parcels with one owner each and will lease a portion of the land required to construct the facility. The Young facility will utilize 81 hectares of an approximately 142 hectares parcel to mount approximately 79,200 solar panels. The remaining area consists of low lying ground susceptible to flooding containing natural drainages and a small lake typically used as water supply for cattle. The Arapey project will utilize 30 hectares of an approximately 200 hectare parcel to mount approximately 40,000 solar panels. The other 170 hectares will remain native grassland and will continue to be used as sheep grazing land. Both solar arrays will consist of fixed panel systems with the panels installed at a 20 degree inclination towards the north to gather optimal sunlight. Both facilities will use polycrystalline photovoltaic panels. The Casa Blanca (Bola De Oro) site, previously used for soy production, covers approximately 100 ha for the eight plants; the three plants proposed for financing will occupy approximately 60 ha. The Raditon Industrial Park will occupy approximately 50 ha, including 5 ha of green space. Only a portion of the 50 ha will be used for the Raditon solar facility as the industrial site hope to attract other enterprises.

2.7 Both facilities will tie into the national grid and UTE will purchase 100% of the energy generated. Young will tie into the national grid by making upgrades to an existing substation and constructing a 16 km long, 31.5 kV medium-tension above ground evacuation line. Arapey will construct a new substation on at the project site and tie into an existing 31.5 kV medium-tension above ground evacuation line which connects to an existing substation approximately five km away. An internal network of subterranean distribution cables to connect the solar arrays to the inverter stations and on to the evacuation lines will also be constructed. Underground electrical cables will be buried to a minimum depth of 0.5 m. The Casa Blanca (Bola de Oro) will construct an underground 400 m long 30 kV to connect to the existing Casas Blancas substation and a 8.5 km long 150 kV line to connect the substation to an existing transmission line. Raditon will connect to an existing distribution line via the construction of a 300 m-long 30 kV line.

2.8 All of the project sites currently have vehicular access via existing roads. Young lies directly on a secondary road which can be accessed from National Route 25. The Arapey site lies along the access road to the hot springs Termas de Arapey, off National Route 3. The Bola de Oro sites can be accessed from a secondary road which lies off of Ruta 3. The Raditon site lies directly on Ruta 3 between Casablanca and Paysandu. No improvements will be required to any of these existing roads. New internal roads will be required inside each facility in order to maintain access to rows of solar panels for maintenance vehicles. Internal access roads will be 5 meters wide.

2.9 At each location, several small buildings and other infrastructure, such as offices, control rooms and canteen, will also be constructed in order to support activities during the construction process and throughout operations. These facilities include prefabricated or modular units to house the invertors, showers and lockers for workers, a kitchen and dining area, on-site offices, equipment storage area, waste storage area, and hazardous waste storage areas. A large area

will be dedicated to materials storage, such as solar panels, electrical cabling, and excavated soils. A perimeter security fence will be constructed around the facility to increase security. More precise information regarding various project components for the Project are detailed in Table 1 below, along with other project specific information.

Table 1: Project Component Information

Project Aspect	
Capacity (Nominal)	20 MW Young (approx. 79,200 panels) 10 MW Arapey (approx. 40,000 panels) 30.5 MW Bola de Oro (approx. 130,000 panels) 8.2 MW Raditon (approx. 32,000 panels)
Invertors (DC to AC)	Young – 24 (1 MW capacity) Arapey – 12 (1 MW capacity) Bola de Oro – 30 (1 MW capacity) Raditon – 8 (1 MW capacity)
Energy Generation (annual)	Young – 37,466 MWh/yr Arapey – 18,257 MWh/yr Bola de Oro –55,910 MWh/yr Raditon – 15,576 MWh/yr **Total – 125,372 MWh/yr**
Total Area Disturbed	Young - 81 ha Arapey – 20 ha Bola de Oro – 100 ha Raditon – 50 ha
Evacuation Lines	Young - 16 km-long, 31.5 kV Arapey – N/A – substation constructed on site Bola de Oro – 8.5 km-long, 150 kV Raditon – 0.3 km-long, 30 kV
Access Road	Internal – 5 m wide access roads will be constructed within each plant – all previously disturbed areas;
Access Road Prefabricated units (offices storage, canteen)	External – no external road construction or imnprovement required at any facility
	Will be installed at each site for offices and to house invertors, transformers, etc
Number of Foundations / Piles	Will depend on soil stability
Living quarters	None required, workers will commute from nearby towns
Hazardous waste storage	No storage of hazardous materials envisioned on project sites
Security fence	Minimum 2.2 m high around each facility
Water Consumption (construction)	Young – 18,750 l Arapey – 9,375 l Bola de Oro – 28,700 l Raditon – 7,500 l

Project Aspect	
Water Consumption (operations)	Young – 18,400 l/cleaning Arapey – 9,200 l/cleaning Bola de Oro – 28,400 l/cleaning Raditon – 7,360 l/cleaning
Wastes (non-hazardous) Construction	Young – 12.5 T Arapey – 6.2 T Bola de Oro – 19 T Raditon – 5 T
Wastes (non-hazardous) Operations	Young – 0.006 T Arapey – 0.0032 T Bola de Oro – 0.0096 T Raditon – 0.002 T
Wastes (hazardous / sanitary) - Construction	Young – 0.259 T Arapey – 0.129 T Bola de Oro – 0.394 T Raditon – 0.11 T
Wastes (hazardous / sanitary) - Operations	Young – N/A Arapey – N/A Bola de Oro – N/A Raditon – N/A
Air Emissions (CO_2 reduction) – Estimated	Approximately 73,900 ton CO_2/year
Number of Workers	Construction Young – 20 - 30 Arapey – 10 - 30 Bola de Oro – 200 (for all eight sites) Raditon – 10 - 30
Number of Workers	Operations Young – 2 Arapey – 2 Bola de Oro – 10 (for all eight sites) Raditon - 2

B. Environmental and Social Setting

2.10 The Giacote projects are both located in northeastern Uruguay. The Young site lies approximately 20 km northeast of the City of Young in the Department of Rio Negro. Much of the terrain surrounding the Project area has already been impacted by human activities, particularly agriculture (soy cultivation and eucalyptus plantations) and cattle, horse or sheep grazing. The solar facility will occupy an area of approximately 81 ha, which will be permanently affected by the erection of the solar panels, transmission line, offices, maintenance roads and other construction works. An additional 61 ha of the parcel will remain in its current state in orer to preserve the site's natural drainages and

water body. The Arapey project site is located in the Department of Salto approximately 15 kilometers from the City of Termas de Arapey. The site's current land use is pasture land for sheep grazing. The solar facility will occupy an area of approximately 30 ha, which will be permanently affected by the erection of the solar panels, transmission line, offices, maintenance roads and other construction works. An additional 170 ha of the parcel will remain as pasture land.

2.11 The Casa Blanca projects are located in central eastern Uruguay, near the City of Paysandu. The Bola De Oro site, previously used for soy production, covers approximately 100 ha for the eight plants; the three plants proposed for financing will occupy approximately 60 ha. The Raditon Industrial Park will occupy approximately 50 ha, including 5 ha of green space. Only a portion of the 50 ha will be used for the Raditon solar facility (estimated to be less than 30 ha) as the industrial site hope to attract other enterprises. The Bola de Oro site and the Raditon site lie approximately 5.5km and 10 km, respectively, from the City of Paysandu, a fairly large city with over 75,000 inhabitants. Both sites have been planned to utilize previously impacted areas; Bolo de Oro has been pastureland and soy fields, while Raditon was formerly a brick factory.

2.12 The Giacote project sites, themselves, are grassland areas but can be described as modified habitat, previously impacted by human activities, currently cattle grazing land and formerly soy production in the case of the Young property and sheep grazing land in the case of the Arapey property. There are a large number of mature exotic eucalyptus trees growing around the project area and surrounding communities; however this is an exotic and invasive species in Uruguay. No protected areas or priority zones for conservation were identified in the environmental assessments for the either facility. The Casa Blanca sites also consist of previously disturbed area, ranching, agriculture and brick production. No protected areas or priority zones for conservation were identified in the environmental assessments for these facilities; however, both sites lie near the Rio Uruguay and the Raditon site contains the Arroyo Juan Santos. A water treatment facility will be constructed at the Raditon site serving any businesses which may choose to operate within the industrial facility. Water from the treatment plant will be released into the Arroyo Juan Santos which flows into the Rio Uruguay.

2.13 Data from baseline flora surveys provided in the Environmental Assessment did not identify any sensitive plant species within any of the project areas. The site visit during the due diligence mission verified the low probability of the occurrence of any sensitive species as the project areas has been largely impacted by pervious activities including agriculture, cattle and sheep grazing and brick production. Several of the sites, particularly Raditon lack vegetation due to pervious land use. As such, care should be taken at each site to control erosion to protect downstream environments including rivers and arroyos.

2.14 The baseline fauna surveys in the environmental assessments did not identify any IUCN sensitive or protected animal species within the project areas; however, a large number of bird species are likely to frequent the pond area on the Young site, the arroyo traversing the Raditon site and the riverine environments near the other project areas. The Young site lies approximately 20 km from the Pastizales de Young (UY010) Important Bird Area (IBA) and 25 km from another IBA, Guichon (UY009). The closest protected areas under Uruguay's Sistema Nacional de Áreas Protegidas (SNAP) are the Esteros de Farrapos, 50 km away and Montes del Queguay (proposed for protection under SNAP), 45 km away. Similarly, the Arapey site does not contain any protected areas either on the project site or in the surrounding area.

2.15 Desktop studies of the surrounding areas and archaeological surveys of the project area were conducted and the results presented in the environmental assessments. While the surrounding areas, rivers in particular, have played a significant role in the area's history, no sites of cultural importance were identified within any of the project areas. The environmental assessments state that no impact to cultural resources will occur as a result of the projects; however, a Chance Find Procedure must be implemented during the construction process as a standard protection measure.

Social Setting

2.16 The Young site lies approximately 20 km northeast of the City of Young and 60 km southeast of the City of Paysandu in the Department of Rio Negro. The City of Young has an approximate population of 18,000 inhabitants. The Arapey project site is located in the Department of Salto approximately 15 kilometers from the City of Termas de Arapey and approximately 65 km from the department capital, Salto. The City of Termas de Arapey is a small resort town with only a few hundred inhabitants and features some of the country's most famous hot springs. Salto is a much larger city with over 100,000 inhabitants.

2.17 The Bola de Oro and Raditon facilities each lie within 10 km of Paysandu, a city of over 75,000 inhabitants. A significant number of workers are expected to come from the Paysandu area. The City of Paysandu has a small, but recently expanded, port on the river capable of the offloading and temporary storage of solar PV panels, thus avoiding 600 km of ground transport from Montevideo to the project sites. It is anticipated that the Paysandu Port will be used to import the PV panels for each of the projects.

2.18 The project has already signed a land lease agreement with the land owners of Young and Arapey based on the total number of hectares to be used. The payments offered are rather generous, representing more income per hectare than currently earned through existing land use practices, and the land owners are satisfied with the offer. The lands

associated with the Bola de Oro and Raditon sites have been purchased outright by the developer.

2.19 Public consultation in the local communities was not required by DINAMA. ESG expressed the requirement to conduct consultation meetings to the client and consultations were conducted in the communities in August 2014. Prior to the meeting the Project placed announcements in the local newspapers inviting interested parties to attend the consultation meetings. The Project has also been working closely with local governments (Intendecias) to build community support and identify projects and initiatives to support which will benefit local community members and groups. The projects have also benefited from much media attention including multiple newspaper articles describing the projects, in general, and their progression, including potential benefits to the community. Due to these initiatives the Project has earned the approval of the communities. No opposition was expressed during the public consultations and most comments and questions revolved around potential employment opportunities for local community members.

2.20 The primary economic activities in the region include agriculture (predominantly soy production) and cattle ranching; however, the Raditon site previously housed a brick production facility. While these are dominant economic activities, other economic activities exist in the region and include the cultivation of forest plantations including pine and eucalyptus for fuel and construction materials. The Termas de Arapey, approximately 28 km from the Arapey project site, also provide economic stimulus to the area from tourism.

2.21 Access to services in the project areas is generally good with the vast majority of homes containing sewer, water and electricity. The areas have a well-developed educational system with several schools for basic and mid-level education. The larger cities of Salto and Paysandu have technical schools and universities for more advanced studies. Residents also have access to health care facilities and other amenities in the nearby cities of Paysandu, Salto and Young. A bus system is also available to transit from the smaller villages, such as Casablanca to the larger cities.

2.22 The rate of unemployment in the rural areas is extremely low primarily due to the vast number of farms and ranches, as well as the overall low population density of the areas outside major cities. Despite the low unemployment rate, the project will likely supply most its labor needs from the large cities of Paysandu, located within 10 km of two project sites, Young, located within 20 km of the Young project site, and Salto, approximately 65 km from Arapey. In order to maintain the workforce required, workers will also be expected to be hired from other nearby smaller villages, particularly in the case of Arapey.

C. Project Schedule and Workforce

2.23 Based on information provided during the due diligence mission, construction on the Bola de Oro projects started in September 2014 with initial site preparation and office construction. The remaining projects are scheduled to begin construction in early 2015, with an anticipated maximum 12-month construction period. Operations are scheduled to commence in early 2016 but possibly in late 2015. The Project is expected to have up to 300 workers during the construction period, spread across the various sites. It is currently anticipated that up to 16 employees will be required at the various facilities during operations. These individuals will be present primarily to monitor real-time plant energy generation and fulfill any maintenance operations required on equipment.

D. Alternatives Analysis

2.24 Neither of the environmental assessments submitted for the projects included a full analysis of alternatives as part of the study; however, each document contained a short section describing the assessment of various alternatives. Before submitting the environmental documentation to DINAMA, several alternative site locations were identified and a selection process ensued to identify the optimal location or preferred alternative. The criteria employed by the Project for the definition of the sites was to first locate the geographical area of the country which presented optimal conditions for the generation of solar energy (high solar radiation). The company identified several possible sites within Uruguay, primarily in the same vicinity. The selected potential sites were then evaluated against factors such as environmental quality of the land, ownership of the land, zoning and current land use, proximity to existing infrastructure (substations and transmission lines), accessibility, and distance from human settlements. Options were also assessed for the transmission line including different routes, medium tension versus high tension lines, and buried or aerial lines.

2.25 The sites selected appear to be ideal as they are: i) privately-owned land with no people living on the land or otherwise utilizing the land; ii) there are existing substations and transmission lines nearby; iii) existing roads allow easy access without disrupting the lives of the community due to major civil works involving the construction of new roads and improvements to existing roads; iv) the closest settlements are a reasonable distance away allowing access to services but minimizing social impact and; v) the properties do not lie within any sensitive or designated area and does not contain any protected species.

III. COMPLIANCE STATUS AND PROJECT STANDARDS

A. Appraisal Process and Local Requirements

3.1 Environmental Assessments (EAs) were prepared for all facilities. The Project submitted environmental assessments for Young and Arapey individually, while the Casa Blanca

Projects were submitted as two separate Industrial sites – the Bola de Oro site, which includes Dicano, Fenima, and Petilcoran, as well as five other small PV projects not proposed for IDB financing, and the Raditon site which includes a water treatment plant and additional areas for other yet-to-be defined enterprises, also not proposed for Bank financing. Each EA was presented to DINAMA and each was approved. The casa Blanca projects (Young and Arapey) were approved by DINAMA in February 2014. The Bola de Oro projects were approved by DINAMA in April 2014. The industrial area encompassing the Raditon project was approved by DINAMA in December 2011. The projects were categorized by DINAMA as Category A (Category C by Bank standards). The bank has classified the group of projects, as one complete project, as a Category B project.

3.2 In conjunction with the EAs, the projects were also subject to conducting archaeological surveys within the project areas, including the direct impact area and indirect impact area. The archaeological surveys did not reveal any items of significance. The project will be required to implement a Chance Find Procedure to ensure no sites will be disturbed during construction.

3.3 As mentioned above, a land lease agreement has been signed with the property owners for the Young and Arapey solar facilities and the environmental license has been granted by DINAMA. The land needed for the Bola de Oro and Raditon properties has already been purchased by the project. The transmission lines have also been granted the required approvals and the transmission line rights of way will be secured by UTE; however, the process is ongoing. The status of these activities will be tracked with the Borrower and UTE throughout project implementation. Due to the short extensions of transmission lines planned, complications in the process are not expected; however, this process is controlled by UTE and delays have occurred on previous similar projects. The Bank and the Borrower have little influence in the process; however, UTE usually provides status updates regarding the progress.

B. IDB Safeguard Policies

3.4 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 Habitats and Cultural Sites; B.10, Hazardous Materials; B.11, Pollution Prevention; B.12, Projects Under Construction (possibly as this project may start construction before the Project is presented to the IDB Board); and B.15, Co-Financing Operations. The OP-102, Disclosure of Information Policy also applies for this Project. Based on available documentation and observations during the due diligence mission, the OP-710 on involuntary resettlement will not be triggered for this Project as no physical resettlement will occur. The Disasters Risks Management

Policy (OP-704) is not triggered; however, the project locations occur near rivers which have experienced recent flood events even though the actual project locations were not affected by the flooding. The potential risk of flooding has been assessed by the Project and has been deemed low risk.

3.5 Table 1, below, illustrates the Project's capacity to comply with IDB's various policies and directives.

Table 1: Compliance with IDB Policies and Directives

Policy / Directive	Applicable Aspect	Compliance Rationale
OP-703 Environmental and Safeguards Compliance		
B.1 Bank Policies	Compliance with applicable IDB policies	The project is currently in full compliance with all IDB policies and directives. The implementation of the various ESMPs (PGASs) will ensure the projects remain in compliance once construction commences.
B.2 Country laws	Compliance with country laws and regulations	The project is in full compliance with all Uruguayan laws and regulations. Land lease agreements and other permits are complete for the solar facilities. Land lease agreements and permits are still pending for the transmission line (UTE's responsibility) and will be monitored by the Bank
B.3 Screening and Classification	Application of appropriate classification	The Project has been screened using the Bank's toolkit and has been classified as a Category B operation.
B.4 Other Risk Factors	N/A	N/A
B.5 EA Requirements	Application of adequate assessment process	In accordance with both Uruguayan regulations and Bank policies for Category B projects, an Environmental Assessments was prepared for each project. The EAs were reviewed by ESG.

Policy / Directive	Applicable Aspect	Compliance Rationale
B.6 Consultations	Project has undergone appropriate public consultation	Public consultations were conducted in the local communities in August 2014. Numerous meetings have also been held between the Intendencias of the respective regions and the project developer. Consultations and open dialogue will continue with the community throughout construction and operations.
B.7 Supervision and Compliance	Internal supervision and reporting and Bank supervision	Annual reports must be submitted to the Government (DINAMA) during construction. The Project will submit semi-annual compliance reports during construction and annual compliance reports during operations to the Bank. Additionally, Government entities, as well as the IDB Environmental Safeguards Unit, may conduct their own supervision of the project. The Bank will conduct annual supervision visits.
B.8 Transboundary Impacts	N/A	The Project does not impact neighboring countries.
B.9 Natural Habitats and Cultural Sites	Conversion of natural habitat	The project sites, in the northeastern areas of Uruguay, consist of agricultural and grazing land; however, are considered either natural habitat for the pasture lands or an area of high soil conservation value in the agricultural areas. These habitat types are abundant in the area and the sites do not contain any protected areas. No sensitive species of flora or fauna were documented in the environmental assessments. The Project does not present a significant conversion of natural habitat.
B.10 Hazardous Materials	Waste management	The Project does not envision the storage of hazardous materials within the work site during construction activities. Nevertheless,

Policy / Directive	Applicable Aspect	Compliance Rationale
		each project's Plan de Gestión Ambiental (PGA) provides a strict waste management program, including waste segregation. Due to the nature of the operation, no hazardous materials need to be stored on-site during construction (fuel, oil, and lubricants for vehicles will be supplied by a contractor and vehicle maintenance will occur at nearby garages). It is currently envisioned that no hazardous materials will be stored at the facility during operations. A licensed contractor will be contracted to handle the waste management, both general waste and hazardous wastes.
B.11 Pollution Prevention	Pollution control and CO_2 emissions	The project's PGA provides a strict waste management program including a robust recycling program involving local waste contractors. A certified contractor will be hired to remove wastes from the project site on a regular basis. The project will reduce the country's CO_2 emissions by approximately 73,900 tons CO_2/year (estimated) by providing a source of green energy.
B.12 Projects Under Construction	Some of the project is in construction	Construction works have commenced at the Bola de Oro site (in September 2014) and the Raditon site (December 2014) including initial grading of the land and placement of refabricated office buildings. Construction works have not started at any of the other facilities.
B.13 Non-Investment and Flexible Lending Instruments	N/A	N/A

Policy / Directive	Applicable Aspect	Compliance Rationale
B.14 Multiple Phase Loans	N/A	N/A
B.15 Co-Financing Operations	Potential presence of other lenders	Other potential lenders, including the Canadian Climate Fund and a commercial bank, may support the Project. The Project's ESMP will comply with other lender's policies and assist the Project to maintain a high level of compliance.
B.16 In-Country Systems	N/A	N/A
B.17 Procurement	N/A	N/A
OP-710 Involuntary Resettlement	N/A	No physical displacement will occur as a result of the project
OP-765 Indigenous Peoples	N/A	No indigenous communities or peoples will be negatively affected by the Project.
OP-704 Disaster Risk Management Policy	N/A	The project is located near rivers and water bodies which have the potential to flood during extreme storm events or prolonged rains. While flooding is not anticipated at any of the project sites, the Project has designed a steel support system in order to withstand potential flooding events and maintain operational capacity.
OP-270 Gender Equality	Avoiding gender discrimination within the Project or as a result of the Project. Providing opportunities for women.	Women will be incorporated into the labor force when feasible; no gender discrimination will occur due the project. The Project is currently attempting to identify social programs to benefit women in the local communities though consultation with the Intendencias in the local communities.

Policy / Directive	Applicable Aspect	Compliance Rationale
OP-102 Access to Information Policy	Project information disclosure	IDB has made all relevant project documentation available on their website. The Project has adequately disseminated information in the local community in newspaper announcements. Public consultation meetings have occurred for the solar facilities and associated transmission lines.

C. Project Requirements and Standards

3.6 The EAs associated with the various projects do not contain project-specific Environmental and Social Management Plans (ESMP) or Plan de Gestión Ambiental y Social (PGASs); however, the Project has developed separate PGASs. PGASs have been developed for the Giacote projects, the Bola de Oro site and the Raditon site, incorporating the entire Industrial site. These are critical documents establishing plans of action and methodologies during construction to reduce and minimize potential environmental and social impacts. Each PGAS outlines the Project's environmental and social responsibilities including waste management, erosion control, traffic management, health, safety and labor, site restoration plan, monitoring and auditing. The PGASs also address specific project location related issues such as minimizing impacts to the property owner such as traffic, noise and dust. The PGASs are very similar; however, the Raditon site has its own specific PGAS developed for the entire Industrial Site. The site will be managed by the Intendencia Municipal de Paysandu for at least the first few years of operation.

3.7 The Project aims to support projects and programs directed at improving the lives of women and children in the area. Currently, the project envisions establishing an education program for school children and adults to visits the facilities, once in operation, to learn about the project and the solar energy industry in general. As this is the first large-scale solar energy project in the area, an education program which includes a field trip will be a unique experience for school children. Public consultation meetings and meetings with the local officials (Intendencia) will also help to identify other potential projects or programs which may benefit the local communities. Additionally, the project is working with a local tech school to help develop curriculum to teach students about solar energy.

3.8 A Grievance Mechanism has been established to track and mange (respond to) any concerns or complaints levied by the community. The Grievance Mechanism was

introduced to the communities at the public consultations in August 2014. A detailed register will be maintained to manage any complaints presented and track responses and resolutions. This system will be maintained throughout the Project lifecycle.

3.9 Currently the Project complies with the Bank's safeguard policies as verified during the due diligence mission and documentation review. Supervision missions conducted during the construction and operations phases will ensure continued compliance with Bank policies.

IV. KEY ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS

A. Summary of Key Impacts and Risks

4.1 The due diligence mission conducted in September 2014 identified the main impacts and risks as: land use change (conversion of crop lands or native grasslands), air emissions related to dust and particulate matter, waste management, and traffic issues due to a large increase in vehicular traffic during construction. The developer has prepared project-specific PGASs to adequately address these issues throughout the construction phase.

B. Environmental Impacts and Risks

4.2 The primary impacts of concern identified in the environmental documentation were the conversion of crop lands, visual impacts associated with the change in land use, dust emissions during construction activities, and water use, primarily during operations. While the some of the project area is considered to be natural habitat (due to the rich soils), the sites exhibit evidence of several decades of human impacts and consist entirely of agricultural fields, cattle pastures, a brick factory and outcrops of non-native pine and eucalyptus trees. The entire surrounding community consists of similar impacted habitat primarily consisting of agricultural fields, primarily for soy production, ranching properties and some tree plantations. The conversion of agricultural fields, cattle pastures and rows of exotic trees would not constitute a significant degradation of natural habitat.

4.3 In order to reduce the impact to water resources the Project will limit the number of cleaning events for the solar arrays and will use modern technologies to clean the panels. Water efficient high-pressure washers and scrubbers will be utilized during the cleaning process to reduce the amount of water consumed. Total water consumption during operations is anticipated to be approximately 126,720 liters/year for all of the facilities combined, based on two cleanings per year at each facility.

4.4 The project areas do not lie within any known hazard area including volcanic zone, earthquake zone or landslide area; however, the projects are situated within low-lying areas within a few kilometers of major rivers which have experienced recent flooding

events that ultimately did not affect the project site, despite recent drought conditions in the country. This could pose an elevated risk due to possible climate change events, particularly increased rainfall and stronger, more frequent storm events leading to more flooding events. The potential risk of flooding has been assessed by the Project and has been deemed low risk. The project itself will not exacerbate any potential flooding events. A natural hazard risk assessment should be conducted for the Project.

C. Social Impacts and Risks

4.5 The due diligence mission to the Casa Blanca and Giacote sites did not identify any significant social impacts to the nearby populations. This is mainly the result of factors such as (i) the low-impact nature of the technology associated with solar plants (ii) the fact that the sites are not adjacent to major human settlements, and (iii) the project sites are owned by one owner and little economic activity occurs on the land making compensation to the owner an easy process, in the case of the Giacote projects, or the land has already been purchased by the Project, in the case of the Casa Blanca Projects. The Giacote owners have already signed land lease agreement with the Borrower for the duration of the project life-cycle and as mentioned above, the Casa Blanca sites are already owned by the Project.

4.6 Land acquisition for the transmission lines associated with energy projects is an important issue in Uruguay. UTE, the national energy regulator, controls all transmission lines in Uruguay and maintains a separate process for the licensing, permitting, consultation, and land use agreements. All the solar facilities and their associated transmission lines have already completed these processes; however, UTE has not yet acquired the actas (land lease agreements) along the transmission lines. This process will be monitored by the Bank and UTE will provide the signed actas to the Bank once completed.

D. Cumulative Impacts

4.7 A cumulative impacts analysis was not conducted as part of the EAs for the project, as the projects are in different departments and they all lie in a fairly remote areas surrounded by agricultural and cattle ranching lands. The vast majority of these lands consist of large parcels of privately owned lands. There are also several IBAs in surrounding areas in which projects requiring construction or land disturbance will be limited. Should developmental growth continue in the area, cumulative impact assessments should be evaluated in the future.

4.8 The Projects will be constructed in rural environments, somewhat isolated from any large settlements or other infrastructure aside from the business which will eventually occupy the industrial areas. Aside from the permitted industrial areas, no other projects are

currently known to be coming to the surrounding areas in the immediate future; however, other solar projects are proposed in neighboring departments in northern Uruguay.

4.9 The success of the Project could attract more growth in the area particularly in the solar energy sector, particularly as this is one of the first large-scale solar facility in Uruguay (the Bank knows of one other facility, La Jacinta, which was supported by the Bank). This potential growth would possibly result in net positive social impacts on the surrounding communities by providing employment to local workers and contracting local services as well as providing beneficial social programs to local schools and community based programs and other social programs such as donation of recyclable goods to the community.

E. Positive Impacts

4.10 The Project will likely result in net positive benefits for the nearby communities as well as the country, in general. The Project, during construction phase, will provide direct employment to approximately 300 workers and another 16 permanent staff during operations. A preference for workers from local communities will be provided and, due to the proximity of Young, Paysandu and Salto, it is anticipated that local labor will be sufficient to fulfill the Project's labor requirements. Various other enterprises located in area will benefit from contracts issued to complete the construction activities.

4.11 The Project will be tied into the Uruguayan national grid, providing green energy for the country. The energy generated at the facilities is expected to reduce the country's carbon emissions by over 73,900 tons CO_2/year, based on an emission factor of 0.59.

4.12 The Project is currently working with the communities and local officials (intendencias) to identify potential social programs which the Project can support. Preference will be given to social programs which benefit women and children. School field trips, as well as site visitations for other visitors, are envisioned for the future when the plants are in full operation to teach school children and the community about solar energy. The Project has also expressed a desire to help develop curriculum on renewable energy which can be taught at a local tech school.

V. MANAGEMENT AND MONITORING OF ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY AND LABOR IMPACTS AND RISKS

A. Description of Management Systems and Plans

5.1 The Casa Blanca/Giacote solar power project has developed two project specific Plan de Gestión Ambiental (PGA) according to the requirements established by the Uruguayan legislation and in line with the Bank's policies. The PGAs are practically identical but

were developed individually in compliance with Uruguayan regulations. One PGA will serve for the Indistrial Sites, including the solar facilities and other business which will operate within the site in the future. The other PGA will cover the individual solar facilities. The PGAs have been submitted to DINAMA; under Uruguayan legislation DINAMA does not need to approve the PGA but is entitled to send comments and require modifications to the PGA. The PGAs include regular monitoring of the facilities and annual reports will be prepared and submitted to DINAMA during construction concerning noise, air emissions, waste management, health, safety and labor performance, as well as other issues. Detailed logs will be maintained to document worker trainings, worker health certificates, work site incidents and accidents, waste registers, and vehicle maintenance. A semi-annual report will be provided to the Bank during construction and annual reports will be provided during operations.

5.2 Much of the early preparation work for the Project, including environmental and social impact analysis, permitting, and land lease agreements, is complete. Additional social activities have also been implemented by the Project to develop and maintain a good relationship with the local communities throughout the project life cycle including:

i. Public Consultations. The Project has organized and conducted public consultation meetings with community members, including women's groups, NGOs, and local authorities, including intendencias. The consultations provided an opportunity for interested people to learn about the project and have their doubts and concerns addressed by company representatives. A register has been maintained documenting the names of those in attendance and any concerns raised by the community. The Project should plan to continue meeting with the public throughout the construction process.

ii. Grievance Mechanism. The Project has implemented a Grievance Mechanism to allow stakeholders an opportunity to voice their opinions, concerns, complaints, or comments outside of the public consultation meetings. These comments will be recorded in a database, as well as the Project's responses to these comments in order to monitor the resolution of any grievances. Issues will be tracked to determine how the Projects respond to complaints and how project teams work with the complainants to resolve outstanding issues. The Grievance Mechanism will be maintained throughout the life of the Project.

iii. Community Relations Plan. A detailed Community Relations / Engagement Plan has been developed. The goal of this Plan is to establish community participation mechanisms and build positive relationships with interested groups to avoid or minimize potential social conflict situations during project execution as well as to develop community based social programs that best fit the needs of the community. This plan provides both a general framework and specific procedural guidance for a continuous dialogue between the local population and representatives of the company.

iv. Potential Social Programs. The consultations with local authorities and community groups should help identify potential social programs to support in the areas surrounding the project sites. Programs to benefit school children and environmental programs focusing on solar energy have been identified as potential opportunities. Continued communication with local community groups will assist to identify more community based projects which will specifically benefit women, children and the poor.

B. Monitoring and Supervision

5.3 This project includes different levels of supervision. The most relevant ones include (i) Internal project supervision, defined within the ESMPs and as required to the Government of Uruguay; (ii) Bank supervision, carried out regularly by the project team with the support of specialized consultants as needed; and (iii) inspections from DINAMA, an entity of the Uruguayan Government responsible for enforcement of compliance with environmental laws and regulations. The Bank will conduct an annual supervision mission during the construction phase and will require semi-annual compliance reports from the Project during construction. Annual reports will be required during operations. DINAMA will require annual reporting during construction and may conduct site compliance visits.

C. Indicators

5.4 In the case of environmental indicators, the project will be assessed in terms of compliance with the IDB Safeguard Policies and compliance with local regulations. The annual report provided by the Borrower will detail vital information including calculated reduction of CO_2 emissions and GWh generated. Based on current energy production in Uruguay, the Casa Blanca/Giacote Project is expected to create a reduction of over 73,900 ton CO_2/year; as reflected in the development goal of a reduction of 73,900 ton CO_2/year. Carbon reductions will be directly related to the amount of energy generated, of which, a goal of 125.3 GWh has been established.

5.5 In the case of the social support programs, potential projects or programs must be further developed through continued consultation with local authorities and community groups; however significant dialogue has occurred with the intendencias and some ideas have been developed. Following project approval, a chronogram of activities will be developed which will include a list of components, specific activities for each component, and expected results. Results of the social programs will be reported in the semi-annual environmental and social monitoring reports.

VI. REQUIREMENTS TO BE INCLUDED IN THE LEGAL AGREEMENTS

6.1 Based on the ESDD conclusions, the conditions described below are required to be fulfilled for the Project prior to loan approval/financial close and throughout the life of the loan, in form and substance satisfactory to IDB:

Throughout the Life of the Loan

6.2 The IDB will require within its Loan Agreement that the Project and each Project party (Sponsor/Borrower/Company) and other Project/Environmental parties, including construction companies and operators, and any contractors and sub-contractors will, at all times during the life of the Loan Agreement, comply with the following requirements:

1. All applicable environmental, social, health and safety, and labor regulatory requirements of Uruguay.

2. All requirements associated with any environmental, social, health and safety, and labor related permits, authorizations, or licenses that apply to the Project, the Borrower or any party responsible for executing the Project or its mitigation measures.

3. All environmental, social, health and safety, and labor requirements of the Project contracts and any subsequent modifications.

4. All aspects and components of all of the Project's environmental, health and safety, social and labor documents.

5. All relevant IDB policies such as the Environment and Safeguards Compliance Policy (OP-703), the Disaster Risk Management Policy (OP-704) and the Disclosure of Information Policy (OP-102), the Involuntary Resettlement Policy (OP-710), the Operational Policy on Indigenous Peoples (OP-765) and the Gender and Equity in Development Policy (OP-270) and their respective guidelines.

6. Comply with all the requirements indicated in the Environmental and Social Action Plan (ESAP) or Corrective Action Plan (CAP) should one be required following supervision visits.

Prior to First Disbursement

6.3 The Project will implement the project specific ESMP (Plan de Manejo Ambiental or Plan de Gestión Ambiental) to assess and mitigate the negative impacts associated with the Project. The ESMP includes a defined monitoring and supervision regime. All project contractors will also be required to comply with the actions described in the ESMP.

6.4 The Project will appoint an Environmental and Social Specialist for the duration of the construction period to prevent and manage potential impacts and supervise and monitor

mitigation measures. The EPC contractor shall present to the Bank an organizational chart illustrating roles and responsibilities throughout the project cycle.

6.5 The Project will continue to conduct community engagement activities with local authorities (La Intendencia) and community groups to identify and implement potential social programs. The Project will look specifically to support social programs directed at benefitting women, children, and indigenous groups.

6.6 The Project shall demonstrate to the Bank that all pending land purchase and land lease agreements have been finalized and commitments honored.

6.7 Copies of relevant permits, contracts, and agreements shall be submitted to the Bank.

Prior to Each Disbursement

6.8 The Sponsor/Borrower/Company shall certify compliance with all environmental, social, health and safety, and labor requirements in the loan agreement, including any Corrective Action Plans if applicable.

Prior to Operations

6.9 The Project will develop and implement a project specific ESMP for Operations to assess and mitigate the negative impacts associated with the Project during the operations phase. The ESMP will include a defined monitoring and supervision regime for Operations phase. All project contractors will also be required to comply with the actions described in the ESMP.

6.10 The IDB, or an E&S consultant appointed by the IDB, shall certify compliance with all E&S requirements of the loan agreement including any Corrective Action Plans, if applicable.

PHOTO LOG – Casa Blanca/Giacote Solar PV Plants

Figure 1: View of Raditon Site and initial construction activity

Figure 2: View of Bola de Oro complex

Figure 3: View of Young site