

## Environmental and Social Data Sheet

### Overview

Project Name:	CA CCFL II - SOLAR PV PLANTS
Project Number:	2014-0633
Country:	Honduras
Project Description:	<i>Allocation under the Central America Climate Change Framework Loan II. The project consists of the construction and operation of 3 solar PV (Photovoltaic) Plants with total installed capacity of 70MW (81.5MWp), named Pacifico I (20MW/23.2MWp), Choluteca I (20MW/23.3MWp) and Choluteca II (30 MW/35MWp), located in the Choluteca department in Honduras. It aims at providing for the increasing electricity demand from a renewable source.</i>
EIA required:	yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	yes

### Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project will help mitigate CO<sub>2</sub> emissions associated with electricity production through renewable energy generation.

If located within the EU, the project would fall under Annex II of the Environmental Impact Assessment Directive. This would leave it to the competent national authority to determine the requirement for an EIA based on the screening criteria specified in Annex III of the same directive. Environmental impact assessments (EIA) were conducted for each of the project locations (Pacifico I and Choluteca I&II) including public consultation. The environmental licences were issued by the competent authority in January 2014 and July 2014, respectively. The authorisation of works at the substation is still pending.

According to the EIAs, the PV plants will have very limited environmental impacts due to the technology used, the location of the site, proximity to existing grid infrastructures and because the land to be occupied by the plants was uninhabited and used for grazing by the former owners. There are no impacts on sites of nature conservation. The project does not create significant barriers to the movements of people.

The implementation of the project requires the extension of the substation onto a populated area. This implies very limited resettlement (6 families) which is being implemented in compliance of IFC rules, which are in line with the Bank's standards.

The project is deemed satisfactory under environmental and social aspects, under the condition that the Environmental and Social Action Plan agreed by the promoter with IFC, which is cofinancing the project, is implemented. The project is also being cofinanced by OPEC Fund for International Development. In addition, an undertaking is proposed to ensure that the works in the substation are executed only when the necessary authorizations have been obtained.

<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

## Environmental and Social Assessment

### Environmental Assessment

The project concerns the construction of three solar photovoltaic power plants which will have a total installed capacity of 81.5 MWp as well as 11km of grid connections and the expansion of an electric al substation. They are all located in the vicinity of Choluteca, Honduras, using around 255 hectares of land. The project will use 267,280 silicon poly-crystalline panels which will be mounted on 3,341 one-axis trackers. The PV plants are connected to the substation St. Lucia, through 34.5 kV interconnection lines of 7 km (Pacifico I) and 4 km (Choluteca I and Choluteca II share the same structures, with separate circuits).

In accordance with local legislation, the developers engaged qualified environmental and social consulting firms to prepare the Environmental Impact studies (EISs) for the three projects (Choluteca I, Choluteca II and Pacifico I) and the connection lines. The studies followed the terms of reference (ToR) to comply with requirements of the Secretaria de Recursos Naturales y Ambiente (SERNA) in order to obtain the necessary permits and approvals. They analyse potential impacts on flora, fauna, water resources, visual impact, land and society. The EISs were finalised in 2013 and 2014 and conclude that the project has no significant environmental and social impacts.

Regarding biodiversity risks it is noted that the three projects are located within modified habitat, mostly composed of pasture lands and annual crops, and patches of dry forest and secondary vegetation. No new access roads will be built and most part the transmission lines will use existing public right-of-ways. Given the semi-urban siting of the Santa Lucia substation, the last 500 meters of the two transmission lines will be buried. The project will not negatively affect any nature conservation site. The nearest ones are Managed Area El Jicarito, 8km south and Cerro Guanacaure 12km east. No protected or endanger species were identified in the area's biodiversity.

Residual environmental risks are mostly related to construction activities and waste water disposal. The project's environmental mitigation measures therefore include the inventorying of all trees cut and replanting 3 for each one cut, water spraying to avoid dust during construction and continuous monitoring of the quality of used water.

Social issues of the project are explained in more detail in a separate section below.

The environmental authorities have not yet determined at this stage whether the works at the substation can be executed under the current permit of the substation, or if additional studies are required. The obtention of environmental authorisations related to works at the substation fall under ENEE's responsibility and is therefore outside control of the promoter. An undertaking is proposed to ensure that the works in the substation, which are part of the project, are executed only when the necessary authorizations have been obtained. ...

The environmental licences were issued in 2014 by the "Secretaria de Recursos Naturales y Ambiente" and the conditions imposed are in line with the ones included in the EISs. IFC, which cofinances the project, performed their Environmental and Social Review in summer 2014. While its conclusions are broadly satisfactory, the project will have to comply with a detailed environmental and social action plan (ESAP<sup>2</sup>) prepared in accordance to the Performance Standards of the International Finance Corporation (IFC). An undertaking requires compliance with IFC's ESAP. The project's financing contract with the intermediary and IFC includes the requirement to comply with ESAP. Progress monitoring on compliance with the ESAP is also included in the mentioned contracts.

As part of the community development commitments, the project has already implemented social projects in five communities, including: a community centre, water well and storage

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<sup>2</sup> See: [ESAP link](#)

tank, a 37000 litres potable water tank, the fencing of a school and the electrification of 100 homes. It has also organized the distribution of any wood and shrubs removed from the project site amongst 35 small distributors, all in close collaboration with the community to avoid tensions over these materials.

### **EIB Carbon Footprint Exercise**

The PV power plants are expected to produce annually 147 GWh of electricity an average, and will not generate any absolute CO<sub>2</sub> emissions. Overall, the project will result in relative emissions of minus (i.e. savings) of 94.5kt CO<sub>2</sub>-e/yr. For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

### **Social Assessment**

The expansion of the Santa Lucia substation will imply the resettlement of 6 families. The process is being implemented in compliance of IFC rules, which are in line with the Bank's standards. The ESAP includes the requirement to perform a socio-economic baseline assessment and develop a Land Acquisition, Easement and Livelihood Restoration Plan for those affected by the Sta. Lucia substation's expansion. During the mission the families were visited and queried about the process and outcomes. They will all be relocating to the vicinity, acquiring properties with the payments received of superior quality and size. They acknowledged to have been well informed during the process and being aware of the grievance mechanism in place. The process will also include ex-post visits to ensure the satisfactory outcome of the resettlements. No indigenous population will be negatively affected by the project.

The ESAP further requires the promoter to implement of a project-specific Environmental, Social and Occupational Health and Safety Management System (ESHS-MS). Such requirement is deemed satisfactory to the Bank.

Honduras has one of the world's highest crime and violence rates. This, together with a significant number of workers, both local and foreign could present some security issues. To mitigate this risk the promoter is required by the ESAP to undertake a Security Risk Assessment for the project and to develop a Security Management Plan, including training and awareness sessions for workers. The site is heavily protected.

### **Public Consultation and Stakeholder Engagement, where required**

Public consultation was conducted during 2013 and 2014, some of it in the context of the EIA's. In addition, the Environmental and Social Action Plan requires the promoter to develop a Stakeholder Communication and Engagement Plan (SEP).