## **Environmental and Social Data Sheet**

## Overview

Project Name: Sonabel PV power plant

Project Number: 2002 0002 Country: Burkina Faso

Project Description: The project concerns the construction of a 30 MW solar

photovoltaic power plant located in Zagtouli on the outskirts

of the capital of Burkina Faso, Ouagadougou.

EIA required: yes

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

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

The project will help mitigate CO2 emissions associated with electricity production through renewable energy generation. If located within the EU, according to the technical characteristics, 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. The solar PV project underwent a simplified EIA procedure (as opposed to a full EIA one required for more complex projects) which foresaw the preparation of an Environmental Study (Notice d'Impact sur l'Environnement - NIE) and a public consultation. A favourable opinion to the project was issued by the Ministry of Environment in May 2013. Based on the NIE the project will have very limited environmental and social impacts because of the nature of the project, because the site is located in an industrial area right next to an existing HV substation and because the land to be occupied by the project is uninhabited and owned by promoter. There are no impacts sites of nature conservation. While no significant impacts are indeed expected, the quality of the study falls short of the standard that would be acceptable for the Bank especially for what concerns the initial baseline analysis upon which the assessment is based. Moreover the existing NIE refers to a previous version of the project which was smaller in size (22 MW). As a result of that the Bank is requiring that an updated Environmental and Social Impact Study complying with EIB criteria and referring to the new installed capacity is prepared by promoter. An information day to present the new ESIS to all stakeholders shall also be organized.

## **Environmental and Social Assessment**

#### **Environmental Assessment**

The project relates to the construction of a new solar photovoltaic (PV) power plant with a peak capacity of 33 MWc and a nominal capacity of 30 MW. The PV modules shall use silicon crystalline technology and be mounted on fixed structures. The plant shall be connected to the adjacent Zagtouli substation via a short 33 kV overhead cable.

The entity in charge in Burkina Faso for the implementation and the monitoring of the government's policies on environment is the Ministry of Environment and Sustainable Development (MEDD). An environmental agency (Bureau national des Evaluations Environnementales – BUNEE) was recently mandated by the MEDD to manage the EIA process. Burkina Faso approved law N.005/97/ADP on environment ("Code de

<sup>&</sup>lt;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 CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

l'Environnement au Burkina Faso») on 30/01/1977 while Decree N.2001-342/PRES/PM/MEE of 17/07/2011 established the currently applicable rules on Environmental Impact Assessment. According to this Decree projects are classified under three possible categories depending on their relevant activity sector. Projects under category A have to undergo a full EIA ("Etude d'Impact sur l'Environnement"), projects under category B are subject to a simplified EIA ("Notice d'Impact sur l'Environnement") while projects under category C do not require any kind of EIA. The main difference between category A and category B projects is that for the latter, compared to the former, the scope and depth of the study and also the public consultation are more limited. The scope of the study is in any event discussed and agreed on a case by case basis between the proponent and the MEDD.

According to the same Decree all renewable energy projects, with the exception of hydro, are automatically classified as B unless the competent authority decides otherwise. The Sonabel PV power plant was therefore classified as B. The agreed NIE included a non-technical summary, a description of the project and of its institutional framework, an analysis of the baseline and of the main project impacts and an Environmental and Social Management Plan (ESMP) outlining the mitigation and compensation measures that will need to be implemented.

Based on the NIE most of the impacts are concentrated during the implementation period and can be well mitigated through appropriate construction practices that are respectful of the environment. Air pollution by dust and gaseous emissions generated by moving vehicles will be contained through measures such as confining the construction activities, imposing speed limits and water sprinkling. Noise impacts will be mitigated by avoiding night time work and through noise protection equipment for the local workers. A reforestation program is also foreseen to replace some trees that will need to be cut to allow for the installation of the PV plant equipment; two new trees will be planted for every cut tree.

The Bank has been involved in this project since 2012 and has had regular conference calls and meetings with the promoter as well as with AFD and the EU Delegation. It has also carried out an appraisal mission in September 2013 including visits to the project site, to the Zagtouli substation and to the dispatching centre.

## **EIB Carbon Footprint Exercise**

The PV power plant is expected to produce 55.6 GWh of electricity per year and will not generate any absolute CO2 emissions. Overall the project will result in relative emissions of minus 33.2 kt CO2e/yr (i.e. a saving of 33.2 kt CO2e/yr) as a result of the operation of the three wind farms. 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**

There are no special concerns on social aspects. The project entails neither land acquisition nor involuntary resettlement. The land used by the project is uninhabited and already owned by the promoter. No additional land acquisition will be necessary to accommodate the 30 MW version of the project as the land already owned by the promoter actually allows for a 55 MW project. The land was purchased by Sonabel at the time that the Zagtouli substation project was developed. This project component, which was part of a larger project, was financed by the World Bank whose operating procedures for involuntary resettlement were applied and followed<sup>2</sup>. No vulnerable or indigenous people will be affected by the project. No issues on labour standards are foreseen as Burkina Faso has ratified all the ILO Labour Standards. International standards will also be applied for what concerns occupational and community health and safety. The promoter's project management team will include a health and safety expert and a Health and Safety Plan will be adopted. Ad-hoc information sessions will be organized to avoid the spreading of diseases (such as HIV/AIDS). The promoter has also created a special company fund to support this purpose.

<sup>&</sup>lt;sup>2</sup> This is confirmed by the Implementation Completion and Results Report issued by the World Bank in January 2013

# **Public Consultation and Stakeholder Engagement**

Several public meetings were held by the promoter with the local citizens committees and the municipal authorities of the neighbouring villages (namely Tanghin-Dassouri and Boulmiougou). The first meetings were held in August 2012 mainly to collect general information and identify all the stakeholders. Further meetings were held in September 2012 to inform stakeholders about the project and collect perceptions and concerns to be taken into account in the context of the NIE procedure. The final NIE was also made available to the local population through the municipalities concerned. An information day will also be held to present the new environmental and social impact study required by the Bank.