



European Investment Bank (EIB)

Luxembourg, 20/08/2021

Environmental and Social Completion Sheet (ESCS)

Overview

Project Name: SCALING SOLAR PV ZAMBIA I
 Project Number: 2017-0004
 Country: ZAMBIA
 Project Description: The construction and operation of an independent 34MW solar PV plant under the World Bank Group's Scaling Solar program, located in the Lusaka industrial zone, Zambia

Summary of Environmental and Social Assessment at Completion

EIB notes the following Environmental and Social performance and key outcomes at Project Completion.

Scope

The project comprises the construction and operation of a PV plant with capacity of 34MWp (28MWac) and includes connection to the public electricity network, owned and operated by the national power utility and transmission system operator (TSO) - ZESCO. The PV plant will be located within the Lusaka South Multi-Facility Economic Zone (LSMFEZ), about 15 km to the South and East of the Lusaka Central Business District.

Environmental

If the project were located within the EU, it would fall under Annex II of the EU EIA Directive, requiring the competent authorities to determine whether an EIA is required. In line with Zambian EIA requirements and IFC Performance Standards, an EIA process was followed, an Environmental and Social Impact Assessment (ESIA) study, including an Environmental and Social Management Plan (ESMP), was prepared for the project and its grid connection and public consultation meetings were held in 2016. Consequently, the environmental permit was issued on this basis by the competent authority (ZEMA) in 2017.

The area, within which the project site is located, was an inhabited forest reserve until it was de-gazetted in 2007 and designated as the Lusaka South Multi Facility Economic Zone (LS MFEZ) in 2010. This land use change (which preceded the project) brought upon involuntary resettlement that was managed by the relevant governmental agencies

The project site, which occupies 52 ha – about 2.5 % of the overall 2100-hectare LS MFEZ, was an open space with tall grass, shrubs and regenerating trees. The site is adjacent (shares a boundary) to the Lusaka National Park. A 200m buffer exists within the Lusaka National Park for the purpose of demarcation and proactively managing any project negative impact. The ESIA has taken into consideration the possible impact of the proposed site in close proximity of the national park.

From the ESIA study, the project site had no flora and fauna species classified as rare, threatened or endemic to the area or that are of special scientific value. The ESIA study and process carried out was assessed satisfactory in light of the Bank's environmental and social standards.

A project's Environmental and Social Action Plan (ESAP) was developed with some specific conditions required by the Bank including:



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- An Environmental and Social Management System that comprised an Environmental and Social Management System (ESMS) Manual, EHSS Monitoring Plan, Training needs, Registers and Reporting
- A Community Development Plan
- Stakeholder Engagement Plan
- Security Management Plan

Other plans in the ESMS included a Traffic Management Plan, Waste Management Plan, Stormwater Management Plan and an Emissions Management Plan

All these were in line with the Bank's Environmental and Social Standards

The main environmental impacts were expected during construction. During construction and operation, the potential environmental impacts related to the water supply as solar panels need to be cleaned to avoid reduced efficiency due to dust built-up.

An undertaking for water supply was confirmed and supplied from LSMFEZ during construction and will continue to be used during the operational phase

Project will also have positive environmental impacts, as solar generated electricity will displace a significant volume of gaseous pollutants such as particulate matter, SO₂, NO_x and CO₂, compared with thermal generation. The project is also expected to increase the country's electricity supply, reduce load shedding, diversify the country's energy mix away from hydro and thus avoid, or at least reduce, the need for fossil fuel generation in the country.

Monitoring was conducted periodically by the Lenders Engineer (LE) based on the construction activities on site and based on the LE progress reports the Promotor complied with the requirements under the Environmental and Social Management Plan (ESMP).

Social aspects

The project's main social risks and impacts relate to legacy resettlement, traffic, security and labour risks.

The establishment of the LS MFEZ following its designation in 2010 involved two phases of government-managed resettlement – the first in 2012/13 and a second, subsequent resettlement of further claimants in 2014/2015. Both phases of Government-managed resettlement pre-date the project and are not directly attributable to the project, which only covers a small fraction of the area. Recognising however that legacy government-managed resettlement may have led to residual social risks in the project's area of influence, the promoter has committed to addressing such risks on a best efforts basis by providing community-level benefits, such as improved social services or livelihood improvement measures, focusing, where possible, on the households previously displaced from the project site and located in the vicinity of the project site boundaries.

This was done through the development and implementation of a targeted Community Development Plan (CDP), in coordination with the Lenders and implemented at a school and health centre and confirmed by the LE. In addition, there was a dedicated Community Liaison Officer to oversee these engagements, community relations and on-site support.

Increased traffic associated with the project, in particular during the construction phase posed some safety risks to surrounding communities.

However, this was mitigated by having the site fenced and public access to the solar plant restricted. In addition, the LS MFEZ is an area with controlled security access involving armed



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Zambia Police Force personnel and unarmed private security personnel. No incidents were reported during the construction phase.

Other Environmental and Social Aspects

There was a concern arising from the presence of sink holes in proximity to the site and sub surface karstic features and cavities within the site itself.

To mitigate this suitable detailed geophysical testing was carried out to provide information for detailed design and the appropriate geotechnical designs incorporated in the final design by the Promotor as confirmed by the LTA

In addition, as required at appraisal, the land use rights for an additional 11 ha to be leased by the Ministry of Tourism to the Ministry of Finance which would then lease the additional land to the IDC and in turn sub-lease it to the project was executed

Summary opinion of Environmental and Social aspects at completion:

EIB is of the opinion based on reports from the promoter, site visits by the EIB team and inputs provided by Lenders' Supervisors and others, where applicable, during Construction that the Project has been implemented in line with EIB Environmental and Social Standards, applicable at the time of appraisal.