Environmental and Social Review Summary

Sertum Energy

This Environmental and Social Review Summary (ESRS) is prepared by MIGA staff and disclosed prior to the date on which MIGA’s Board of Directors considers the proposed issuance of a Contract of Guarantee. Its purpose is to enhance the transparency of MIGA’s activities. This document should not be construed as presuming the outcome of the decision by MIGA’s Board of Directors. Board dates are estimates only.

Any documentation that is attached to this ESRS has been prepared by the project sponsor, and authorization has been given for public release. MIGA has reviewed the attached documentation as provided by the applicant, and considers it of adequate quality to be released to the public, but does not endorse the content.

Country: Namibia
Sector: Energy
Project Enterprise: Sertum Energy
Environmental Category: B
Date ESRS Disclosed: April 20, 2017
Status: Due Diligence

A. Project Description

MIGA has been requested to provide guarantees covering Investec Bank Limited (“Investec”) non-shareholder loan investments of US$15 million into the Sertum solar project (the “Project”) located in the region of Erongo in Namibia. Investec is seeking guarantees against the risk of transfer restriction, expropriation, breach of contract and war and civil disturbance for a tenor of 15 years.

The Project consists of the construction, ownership, operation and maintenance of a 5 MW solar energy generating facility. The electricity output will be sold to Namibia Power Corporation (Pty) Limited (“NamPower”) under a 25-years Power Purchase Agreement

The Project was awarded through the Renewable Energy Feed in Tariff Program The program was commissioned in 2010 and approved in 2011 by the Minister of Minerals, Mining and Energy. The program is aimed at procuring generation of power from various renewable sources up to a maximum of 5 MW per business. The Project was among the 14 Independent Power Producers that signed a PPA among 27 shortlisted bidders. The Project is under construction with estimated commercial operation dates in July, 2017.

Sertum Energy Namibia Pty Ltd intends to develop the photovoltaic plant on the Areva managed Uranium mine site of Trekkopje, approximately 80 KM out of Swakopmund in the Erongo region of Western Namibia. The 15 hectares plot of land was leased from the Erongo Communal Lands Association. The project is located next to a sub-station therefore no transmission lines are required and an underground cable will be used to connect the
site to the sub-station. The habitat is modified desert due to the mine site and land was unused prior to the project. The site is accessed through the mine site which is located approximately 10 km from the town of Arandis, just off the main highway between Walvis Bay and Windhoek. Enertronica has been appointed the EPC contractor and Protecton Engineering and Khomas Civil Construction have been hired as sub-contractors to conduct civil works, such as installing the solar panels and support facilities.

B. Environmental and Social Categorization

This is a Category B project according to MIGA’s Policy on Environmental and Social Sustainability, because potential adverse environmental or social risks and/or impacts are limited, few in numbers, site-specific, largely reversible and readily addressed through mitigation measures. During construction, key environmental and social risks and impacts include air emissions, occupational health and safety (OHS) and community health and safety of people working on the mine site. During operations, risks and impacts include water consumption, hazardous waste management, and risks of electrocution of people.

C. Applicable Standards

While all Performance Standards are applicable to this investment, based on our current information indicates that the investment will have impacts which must be managed in a manner consistent with the following Performance Standards:

- PS1: Assessment and Management of Environmental and Social Risks and Impacts
- PS2: Labor and Working Conditions
- PS3: Resource Efficiency and Pollution Prevention
- PS4: Community Health, Safety and Security

The land was acquired from the Erongo Communal Lands Association through a lease agreement and did not require any resettlement either physical or economical, therefore PS5: Land Acquisition and Involuntary Resettlement, is not triggered. The habitat was already modified and there are no endangered species living on the land therefore PS 6, Biodiversity Conservation and Sustainable Management of Living Natural Resources is not triggered. There are no indigenous Peoples or Cultural Heritage sites on the land, therefore PS 7, Indigenous Peoples and PS 8, Cultural Heritage, are not triggered.

The project will be expected to comply with the World Bank Group’s General Environmental, Health and Safety Guidelines as well as the sector specific guideline for Electric Power Transmission and Distribution.

D. Key Documents and Scope of MIGA Review
MIGA’s review included a visit to the project site in Trekkopje on the 22\textsuperscript{nd} March 2017. Meetings were held with the client at the site as well as the environmental consultant for the project. A meeting was also held with the Ministry of Environment in Windhoek. MIGA reviewed the following documentation:


E. Key Issues and Mitigation

PS1: Assessment and Management of Environmental and Social Risks and Impacts

\textit{Social and Environmental Assessment:} An Environmental Impact Assessment (EIA) was conducted by EnviroSolutions in December, 2013. Information in the EIA was verified during the site visit. The assessment included meetings with the local community which includes staff working on the mine site as well as communities in Arandis, the closest town to the site. An environmental impact assessment was also carried out for the mine site on which the solar project is situated, therefore extensive assessments were carried out for this area.

\textit{Management Program and Monitoring:} Enertronica was selected as the EPC contractor for the project and Enertronica Construction Namibia (Pty) Ltd will operate and maintain the power plant at site. Enertronica maintains an ISO 8001 certification and site specific OHSAS standards. As the site is located on the Areva Uranium mine, strict management and security is enforced. Enertronica is obliged to comply with Areva’s Environmental Management Plan (EMP) and has also developed a project specific Health and Safety Plan.

\textit{Organizational Capacity and Competency:} As noted above, during all project phases the EPC Contractor will have an EHS Officer on site. This Officer will supervise and coordinate all EHS activities of the contractor and different sub-contractors. Enertronica will hire an EHS officer to support the Contractor’s EHS Officer to ensure that mitigation measures described in the Health and Safety Plan for construction are effectively implemented.

During construction, a Enertronica project manager and site manager are permanently located at the project site to oversee the sub-contractors. All sub-contractors will comply with Enertronica’s Health and Safety Plan, as well as Areva’s EMP. The Manager will be supported from Enertronica’s head office as required.
An environmental and social management plan will be developed for operations, including a monitoring program to ensure relevant data is collected. Annual reports will be developed and submitted to MIGA and relevant authorities.

**Emergency Preparedness and Response:** Emergency preparedness and response procedure has been prepared and are included in the Health and Safety Plan. Assembly points have been identified and drills will be carried out regularly. In case of fire, Areva security will be automatically alerted and the project will use their firefighting services.

**PS2: Labor and Working Conditions**

Construction works for the plant will entail creation of 50 jobs for approximately four months, and operations will involve 10 workers. Enertronica has a policy on gender equality in its workforce which will be adhered to for this project. Staff will be hired as much as possible from the local communities. In Namibia, the legal age for work is 18 years and the labor law mentions that children under 18 should not be involved in harmful work. The project will ensure that no person under the age of 18 years is employed to work on the construction or operations of this project.

Enertronica will develop an HR Policy and procedures for the construction and operations phases that will cover all type of workers, including direct workers and contracted workers. The policy and procedures will be based on the head office HR procedures and will be adapted for the site and local environment. At a minimum, the HR Policy will include the following provisions: working relationship; working conditions; terms of employment; workers’ organizations; non-discrimination and equal opportunity; grievance mechanism; prohibition of child and forced labor in its direct operations; and occupational health and safety. The HR Policy will be communicated to all new employees during the induction process. The company will pay above minimum wage. Transport will be provided to and from work and no one will live on site.

**Occupational Health and Safety:** The ESIA includes a description of OHS risks and impacts during construction, operations, and decommissioning, with a series of preventive measures. The main risks and impacts will include heat exposure, traffic safety, exposure to welding light and fumes, working at heights, and potential for fires and/or explosions resulting from ignition of flammable materials or gases. As referenced earlier under PS 1, the EPC contractor will develop and implement the ESMS and related plans for the different phases of the project. Training will be provided for every employee as necessary dependent on their job description and a tool box safety message will be provided every morning before the start of work. Health clinics and hospitals are located in Arandis in case of accidents. Personal Protective Equipment will be supplied to all staff and if it is not warn, the staff member will not be allowed to work. First aiders and fire wardens will be appointed and trained appropriately.

**PS3: Resource Efficiency and Pollution Prevention**
**GHG Emissions:** The project is expected to have a positive environmental impact in terms of GHG emissions as it will provide a renewable source of electric power and will build the capacity of Namibian power generation which relies heavily on energy imports from its neighboring countries.

**Water Consumption:** Enertronica will pay Areva for the piped water on site. Water will be used for sanitary purposes as well as for solar panel cleaning. The panels will only be cleaned with water with high pressure sprayers and no cleaning fluids.

**Pollution Prevention:** During operations, the solar plant will not generate any noise, air emissions, or GHG emissions. Most of the impacts will be generated during construction and decommissioning and include noise and dust which will be appropriately managed through water sprinkling as necessary and adhering to strict day time construction. Electricity will be provided by the municipality and a backup generator will be available in case of outages during both construction and operations. This will be housed appropriately with secondary containment to avoid leakages. All vehicles will be refueled off site and regular maintenance and repair will be carried out at local off site garages. Only drilling equipment will be refueled on site and spill kits will be available in case of spills.

**Wastes:** During construction, solid waste will consist mostly of concrete and packaging material. During operations, solid waste will be mostly generated at the office. During decommissioning, waste will consist of used panels, metals, used oil, and concrete. A waste management system will be developed and implemented by Enertronica. Waste will be segregated in skips and the project will contract a registered waste disposal company to remove wastes. Opportunities for source reduction, as well as reuse and recycling; procedures and operational controls for onsite storage will be developed. As there is no sewage collection network, a septic system will be used, designed and installed in accordance with local regulations to prevent any hazard to public health or contamination of land, surface or groundwater. It will be periodically emptied.

**Hazardous Materials Management:** Provision of secondary containment, drip trays or other overflow and spill containment measures will be implemented in designated areas. Vegetation control if necessary, will be carried out manually without any pesticide use.

**PS4: Community Health, Safety and Security**

**Community Health and Safety:** As the project is located on the Areva mine site, the immediate communities are the work force of the mine. Other affected communities are those living in Arandis, a local town, which vehicles and trucks pass through in order to access the site. Potential adverse impacts during construction will be increased traffic which may represent a risk for the local communities. Transport employees and sub-contractors will be required to produce a valid driver license. Enertronica will develop and implement safe driver and transport safety vehicle procedures, including training sessions for its own and third party haulage contractors, especially during construction.
Hazards most directly related to power facilities occur as a result of electrocution from direct contact with high-voltage electricity or from contact with tools, vehicles, ladders, or other devices that are in contact with high-voltage electricity. Enertronica will use signs, barriers (e.g. locks on doors, use of gates, use of anti-climbing devices), and education / public outreach to prevent public contact with potentially dangerous equipment.

**Security Personnel:** In order to reach the project site, it is necessary to first pass through Areva’s security, which includes a safety induction as well as document verification. The project will also employ its own security during construction and operations. Enertronica will make reasonable inquiries to investigate the employment statement and other available information, including any criminal record, of individuals or firms and will not employ or use any individuals or companies that have abused or violated human rights in the past. PS 4 requirements will be strictly enforced. The site will be fully fenced with a non-fatal electric fence. A CCTV system will be installed during operations along with sensory security lighting.

**Community Consultation:** During the ESIA process a number of community consultation activities were completed both at the mine site as well as the local town, Arandis. Stakeholder meetings were held to discuss the project and to provide an opportunity for the affected communities to raise any concerns. They were interested to hear about the visual impacts of the site as well as employment opportunities. There were no objections to the project.

**F. Environmental Permitting Process and Community Engagement**

In January 2014, the environmental permit was approved for the project. During construction and operations, representatives of the Ministry of Environment and Tourism will visit the project to ensure compliance with Namibian law and the project is expected to report to the Ministry every six months.

Enertronica has a company policy of working with the local communities and will work with them to identify development activities during operations.

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*MIGA supports its clients (as defined in MIGA Policy on Environmental and Social Sustainability) in addressing environmental and social issues arising from their business activities by requiring them to set up and administer appropriate grievance mechanisms and/or procedures to address complaints from Affected Communities.*

*In addition, Affected Communities have unrestricted access to the Compliance Advisor/Ombudsman (CAO), the independent accountability mechanism for MIGA. The CAO is mandated to address complaints from people affected by MIGA-guaranteed business activities in a manner that is fair, objective, and constructive, with the goal of improving environmental and social project outcomes and fostering greater public accountability of MIGA.*
Independent of MIGA management and reporting directly to the World Bank Group President, the CAO works to resolve complaints using a flexible, problem-solving approach through its dispute resolution arm and oversees project-level audits of MIGA’s environmental and social performance through its compliance arm.

Complaints may relate to any aspect of MIGA-guaranteed business activities that is within the mandate of the CAO. They can be made by any individual, group, community, entity, or other party affected or likely to be affected by the environmental or social impacts of a MIGA-guaranteed business activity. Complaints can be submitted to the CAO in writing to the address below:

Compliance Advisor/Ombudsman
International Finance Corporation
2121 Pennsylvania Avenue NW
Room F11K-232
Washington, DC 20433 USA
Tel: 1 202 458 1973
Fax: 1 202 522 7400
E-mail: cao-compliance@ifc.org

G. Availability of Documentation

- Environmental and Social Action Plan, Trekkopje Solar Park, April 2017

The above listed documentation is available electronically as PDF attachments to this ESRS at www.miga.org.