

INFORMATION SUMMARY FOR THE PUBLIC

Host Country:	The Republic of Zambia.
Name of Borrower:	Bangweulu Power Company Limited, incorporated in the Republic of Zambia.
Project Description:	Bangweulu Power Company Limited will develop, construct and operate a solar photovoltaic independent power project with a generating capacity of approximately 55 MW (DC) that will sell electricity to ZESCO, the government-owned power utility, at a tariff rate that is amongst the lowest in sub-Saharan Africa.
Proposed OPIC Loan:	Up to \$19,900,000, for a term of 20-years after the commercial operations date.
Total Project Costs:	Approximately \$60,000,000.
U.S. Sponsor:	First Solar, Inc.
Foreign Sponsor:	Neoen S.A.S. (France), Industrial Development Corporation Limited (Zambia).
Policy Review	
U.S. Economic Impact:	The Project is not expected to have a negative impact on the U.S. economy as it involves the generation of electricity for the domestic Zambian market. U.S. procurement is expected to have a small but positive impact on U.S. jobs. The Project is expected to have a positive five-year U.S. balance of payments impact.
Developmental Effects:	The Project is expected to have a highly developmental impact in Zambia by increasing solar electricity supply by approximately 55MW in a country which is heavily reliant on hydroelectric sources for power. Nearly 95% of Zambia's current installed capacity comes from hydropower plants which have been severely impacted by drought. ¹ Solar energy in Zambia is approximately 0.1% of the country's power generation capacity despite an average of 2,000-3,000 hours of sunshine per year. ² The Project will support Zambia's growing economy and is expected to create employment throughout its construction and operation phases, and will bring advanced

¹ http://www.nytimes.com/2016/04/13/world/africa/zambia-drought-climate-change-economy.html?_r=0

² Energy Sector Profile, 2014 – Zambia Development Agency

	<p>solar generation, operation technologies, and management practices to Zambia. The Project is expected to play a critical role in the U.S. Government’s Power Africa initiative. The Project will help Zambia achieve UN Sustainable Development Goals number 7 (Affordable and Clean Energy) by increasing renewable energy access, number 8 (Decent Work and Economic Growth) through job creation, and number 9 (Industry Innovation and Infrastructure) by being Zambia’s first utility-scale solar power plant.</p>
<p>Environment:</p>	<p>SCREENING: The Project has been reviewed against OPIC’s categorical prohibitions and determined to be categorically eligible. Solar power generation facilities not located in or near sensitive areas and that are unlikely to have significant negative impacts associated with biodiversity, Indigenous Peoples and land acquisition are screened as Category B under OPIC’s environmental and social guidelines because impacts are site specific and readily mitigated. The major environmental and social issues associated with the Project include the need for appropriate health and safety measures and a robust environmental and social management system for day-to-day aspects of construction and operation including solid waste disposal, hazardous materials management and disposal and wastewater treatment and disposal. The Project’s vulnerability to climate change is due to its water use requirement during operations. According to the World Bank Group’s Climate Change Knowledge Portal Zambia has seen a decrease in rainfall in this century, and expects water resources to be affected by changing temperatures, precipitation regimes, and humidity. The Project will be required to consider climate change in its water availability assessment and planning.</p> <p>APPLICABLE STANDARDS: OPIC’s environmental and social due diligence indicates that the Project will have impacts that must be managed in a manner consistent with the following Performance Standards:</p> <p>PS 1: Assessment and Management of Environmental and Social Risks and Impacts; PS 2: Labor and Working Conditions; PS 3: Resource Efficiency and Pollution Prevention; PS 4: Community Health, Safety and Security; PS 5: Land Acquisition and Involuntary Resettlement.</p> <p>The construction, management, and operation of the Project will not adversely impact Indigenous Peoples or cultural heritage. Additionally, adverse impacts on biodiversity are not</p>

	<p>anticipated as the Project is located within an industrial/commercial development zone. Therefore, P.S.'s 6, 7 and 8 are not triggered at this time.</p> <p>In addition to the Performance Standards listed above, the IFC's April 30, 2007 Environmental, Health, and Safety General Guidelines are applicable to the Project. Also the IFC and EBRD "Workers' accommodation: process and standards" are applicable to the Project.</p> <p>Environmental and Social Risks and Mitigation: The Project is an approximately 55MW solar photovoltaic Project to be located near Lusaka, Zambia in an industrial park. An Environmental and Social Management System (ESMS) is in progress, but not yet complete. It will be updated before financial close to include an environmental policy, revised ESMP, a robust description of the organizational capacity to assure appropriate implementation and monitoring of the environmental and social requirements, and a stakeholder engagement plan and grievance mechanism.</p> <p>The Project site is located in an industrial park with modified habitat and no sensitive or endangered species. The Project is close to the Lusaka Game Park, but is well separated from it by Enel Green Power's solar project (i.e., the Ngonye solar project) being also developed in the framework of the Scaling Solar program. Water, solid waste and effluents will be centrally managed by the industrial park, however, the landfill and sewage treatment facility have yet to be completed. The Project will be required to provide OPIC with a waste management plan to assure these facilities will be completed once the Project is implemented or will be required to describe interim measures that will be implemented to manage project wastes in accordance with international standards. Air impacts will primarily be limited to dust from construction and vehicle emissions and will be temporary and managed through standard mitigation measures such as watering of surfaces and provision of appropriate Personal Protection Equipment (PPE) to workers. An Occupational Health and Safety Plan has yet to be completed, but will be required prior to financial close.</p> <p>CO_{2eq} emissions: <1000 tons/year Avoided emissions: 19,000 tons/year</p>
Labor / Human Rights:	The Project will be required to operate in a manner consistent with the International Finance Corporation's Performance

Standards, OPIC's Environmental and Social Policy Statement and applicable local laws.

This Project involves the construction and operation of an approximately 55 megawatt (MW) solar photovoltaic power plant located approximately 15km southeast of the Lusaka central business district (the "Project"). Social risks are mainly related to residual effects from government-led resettlement and compensation which was carried out prior to establishing the industrial estate on which the Project will be located. OPIC will require the Project to implement a Community Development Plan which provides benefits to households displaced from the project site, to include improved social services, access to credit, and/or livelihood improvement measures as directed through community consultation. OPIC will require annual independent third party audits of the Environmental and Social Action Plan, which includes the Community Development Plan.

This review covers the commensurate human rights risks associated with solar power in Southern Africa.