

**Public Information Summary
BIOVEA Energie, S.A.**

Host Country	Cote d'Ivoire
Name of Insured Party	Meridiam SAS, as agent and manager for and on behalf of (1) Meridiam Infrastructure Africa Fund FIPS, and (2) Meridiam Infrastructure Africa Parallel Fund FIPS ("Meridiam")
Reinsured Party	Chubb European Group SE
Project Description	The Project is the design, development, construction, and operation of a 46 MW biomass power plant project in Ayebo, Cote d'Ivoire. It includes the design, development and construction of a 350 meter transmission line, a substation and ancillary road works.
Investment Amount	€25 million
Investment Type	Equity and subordinated debt
DFC Reinsurance Amount	\$9,072,000
Total Project Costs	€220 million
U.S. Involvement	N/A
Foreign Enterprise	BIOVEA Energie, S.A. ("Biovea")
Policy Review	
Developmental Objectives	The Project is expected to have a highly developmental impact in Cote d'Ivoire, a low-income country, by expanding the nation's power supply with an industrial scale biomass power plant fueled by local agricultural waste. Electricity has fueled Cote d'Ivoire's exceptional economic growth since 2011, although the country remains in the bottom quartile for electricity consumption per capita among active DFC countries. The Project aligns with the Ivorian Government's goal of increasing the renewable share of electricity capacity from 23 percent to 42 percent. The power plant will require no additional land resources to produce the biomass needed for combustion. Fired by oil palm leafstalk, the plant is expected to boost income for rural populations, as smallholder farmers will supply most of the needed biomass.
Environment Assessment	Environment and Social Categorization and Rationale: The Project has been reviewed against DFC's categorical prohibitions and determined to be categorically eligible. The Project is screened as Category B because its impacts are limited to areas within its immediate vicinity and the biomass supply chain. The primary environmental issues associated with the thermal power plant are: air emissions of particulate matter, sulfur oxides, and nitrogen oxides (NO _x) and their impact on ambient air quality; water usage and surface water quality impacts from the discharge of wastewaters; solid and hazardous waste (including used oils) disposal;

occupational, health and safety during both construction and operations; life and fire safety; noise; and traffic impacts both during construction and operation of the power plant.

Environmental and Social Standards: The International Finance Corporation's (IFC) Performance Standards (January 2012) 1 (Assessment and Management of Environmental and Social Risks and Impacts), 2 (Labor and Working Conditions), 3 (Resource Efficiency and Pollution Prevention), 4 (Community Health, Safety, and Security) and 6 (Biodiversity Conservation and Management of Living Natural Resources), are triggered by the Project. The Project will be located at a brownfield site in a rural area.

The Guidelines applicable to the Project include the IFC's Environmental, Health and Safety (EHS) General Guidelines (April 2007), IFC's EHS Guidelines for Thermal Power Plants (December 19, 2008), and IFC's EHS Guidelines for Electric Power Transmission and Distribution (April 30, 2007).

Since biomass will be used as a fuel, the Project's net Greenhouse Gas emissions are minimal, and the Project has been considered eligible for carbon credits by the Clean Development Mechanism (CDM).

Environmental and Social Risks and Mitigation:

Social and Environmental Assessment and Management System

The Project has developed a draft social and environmental management system whose components will be further updated as the Project progresses. In 2019, the Project Company updated the Environmental and Social Impact Assessment (ESIA) to assess the Project's potential environmental and social impacts and the ESIA process complied with the requirements of the Ivorian regulations and the IFC Guidelines. The Project is still in the process of appointing additional environmental and social officers to assist in the management of environmental and social issues. The Project Company has prepared frameworks for monitoring and reporting on the Project's environmental and social impacts and these have been summarized in the draft Environmental and Social Management Plan.

Environmental and Social Management Plan (ESMP)

The Project's detailed ESMP is being prepared and it will present additional information on the monitoring of mitigation measures which

	<p>have been designed to reduce the Project’s impacts to ensure compliance with the IFC Guidelines.</p> <p>The Project’s air emissions and their impacts on ambient air quality will be managed by controlling fuel quality and by using the appropriate technology for controlling particulate matter, sulfur oxides, and nitrogen oxides emissions.</p> <p>The Project is expected to result in acceptable levels of ambient concentrations of particulate matter, sulfur dioxide, and nitrogen dioxide, and the Project is expected to comply with the IFC’s EHS General Guidelines and those for Thermal Power Plants. The Project’s noise levels are expected to be within the 3 dB(A) increment recommended by the IFC guidelines.</p> <p>No sensitive fauna or flora were discovered during the Project’s detailed site survey. Water for the Project will be supplied by local boreholes. Treated wastewaters complying with the IFC’s Guidelines will be discharged to the local sewerage network. Public and dedicated hazardous waste disposal facilities will be used for the disposal of solid and hazardous wastes, respectively. The Project’s hazardous materials management plan, occupational health and safety plan (OHSP), and emergency response plans will be used to manage risks associated with fire. The OHSP will also be used to address other safety risks during both construction and operation phases of the Project. Biovea is committed to providing appropriate personal protective equipment, training of all site personnel, and adoption of standard safety procedures during all stages of the proposed Project.</p> <p>In order to manage construction impacts to acceptable levels and ensure compliance with the IFC’s Performance Standards and Guidelines, Biovea will prepare traffic management and construction management plans. The Engineering, Procurement, and Construction (EPC) Contractor will be required to comply with the IFC’s Performance Standards and Guidelines and ensuring that the community impacts are minimized.</p>
<p>Social Assessment</p>	<p>The Project will have impacts that must be managed in a manner consistent with the International Finance Corporation’s Performance Standards, DFC’s Environmental and Social Policy and Procedures and applicable local laws. DFC’s statutorily required language will be supplemented with provisions concerning the rights of association, organization and collective bargaining, minimum age of employment, prohibition against the use of forced labor, non-discrimination, hours of work, the timely payment of wages, and hazardous working conditions.</p>

	<p>Standard and supplemental contract language will be applied to all workers of the Project, including contracted workers.</p> <p>The Project entails the construction and operation of a 46MW power generation plant and electric substation, to be fueled with agricultural residues from existing palm oil production within a 60km radius of the project site, 116 km east of Abidjan. The Project has been designed to avoid risks such as displacement of food crops and avoiding the need for involuntary resettlement.</p> <p>The Project has developed and implemented a framework ESMS that, once fully developed, will address social risk, including labor, commensurate with the risks associated with a biomass power project in West Africa. The project will be required to prepare a detailed EMSP that will include a Supply Chain Action Plan to mitigate the risk of child labor on farms and plantations supplying biomass fuel.</p> <p>This review covers the commensurate human rights risks associated with biomass power and agricultural plantations in Côte d'Ivoire.</p>
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