

**INFORMATION SUMMARY FOR THE PUBLIC  
CAP DES BICHES POWER PROJECT (SENEGAL)**

Host Country:	Senegal
Name of Insured Investor:	ContourGlobal Senegal, LLC
Foreign Enterprise:	ContourGlobal Cap des Biches Senegal
Project Description	Senegal economic development is constrained by a lack of efficient and reliable electricity. OPIC, together with a swap arrangement from the IFC, will provide a loan to finance the development, construction, rehabilitation, and operation of a 53MW Combined Cycle Power Plant that will operate on heavy fuel oil with an option to convert to natural gas, in Cap des Biches, approximately 27km from Dakar, Senegal (the "Project"). The Project will provide efficient and reliable electricity to the Dakar grid.
Total Project Cost:	\$102 million
Proposed OPIC Insurance Amount:	\$25,000,000
Developmental Effects:	This Project will have a developmental impact on Senegal through the rehabilitation and conversion of a liquid thermal power plant to a combined cycle diesel electricity generation facility that will supply power to the country's national grid. The Project will provide an alternative to expensive sources of energy such as poorly maintained emergency plants that rely on diesel. The plant will utilize a flexi-cycle technology system that recovers heat from exhaust gas. The Project aligns with Senegal's Poverty Reduction Strategy, which includes increasing involvement of private operators in the development of energy infrastructure and services. The Project will create several new local jobs and employees will receive technical training in power plant management.
Environment:	<b>Screening:</b> This Project has been reviewed against OPIC's categorical prohibitions and determined to be categorically eligible. The Project has been screened as Category A because its greenhouse gas emissions exceed 100,000 tons of carbon dioxide equivalent (CO <sub>2</sub> eq) per year. The Project's potentially significant impacts include: particulate matter, sulfur oxides, and nitrogen oxides (NO <sub>x</sub> ) emissions and their impact on ambient air quality; water usage and effluent discharges; solid and hazardous waste (including used oils) disposal; handling of hazardous materials (flammable materials such as fuel oil); noise; influx of construction workers; construction traffic; the need to remediate of any contaminated soil and groundwater discovered during site investigation; and occupational health and

safety during both construction and operations (including life and fire safety).

**Environmental and Social Standards:** 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), are triggered by the Project. The Project will be located on a brownfield site in an existing industrialized area and not involve involuntary resettlement or impacts on biodiversity and living natural resources, Indigenous Peoples, or cultural heritage as defined by the IFC. Therefore, Performance Standards (P.S.) 5, 6, 7, and 8 are not triggered by this Project at this time. Guidelines applicable to the Project include the IFC's Environmental, Health and Safety General Guidelines (April 2007), IFC's Environmental, Health, and Safety Guidelines for Electric Power Transmission and Distribution (April 30, 2007) and the IFC's Environmental Health, and Safety Guidelines for Thermal Power Plants (December 19, 2008).

Environmental and Social Risks and Mitigation: Ambient air quality impacts will be managed using the appropriate technology for controlling particulate matter, sulfur oxides, and nitrogen oxides emissions. Greenhouse gas emissions will vary depending on the operating hours of the facility. Under the worst case scenario, CO<sub>2</sub>eq emissions will be less than 297,000 tons annually. Modeling indicates that noise from the Cap des Biches power plant alone will comply with the recommended IFC guidelines; however, cumulative noise levels after considering noise from the adjoining facilities may exceed the IFC's Guidelines at some of the receptor locations. Additional studies are being undertaken to verify noise impacts and appropriate mitigation measures will be implemented, if needed.

Air dispersion modelling indicates that annual air quality standards for sulfur dioxide (SO<sub>x</sub>) Nitrogen Dioxides (NO<sub>x</sub>) can be achieved by the Project. Ambient air quality sampling for SO<sub>x</sub> and NO<sub>x</sub> at locations near the project site were initiated in November 2014. During the initial 2 month sampling period air quality in the vicinity of the project site met both Senegalese and IFC ambient air quality standards.

The engine manufacturer cannot guaranty that the Project's particulate emissions will meet the IFC Thermal Power Guideline value of 50 mg/Nm<sup>3</sup> because the Project will install an ex-factory secondary heat recovery unit to generate additional power. Secondary recovery, which results in cooling and subsequent contraction of stack gases, will increase particulate concentrations in

the stack gas up to 65 mg/Nm<sup>3</sup>. Additional air quality monitoring is required to assess whether the stack emission exceedance will result in adverse impact on ambient air quality. If adverse impact on ambient air quality is projected, additional air pollution controls or other mitigation measures may be required.

No sensitive fauna or flora were discovered during the detailed site survey. Water will be supplied by the local municipality. Treated wastewaters complying with the IFC's Guidelines will be discharged in an open channel which is currently being used by the adjacent facility to discharge their wastewaters to the sea. Both municipal and hazardous waste disposal facilities will be used for the disposal of solid and hazardous wastes, respectively. A hazardous materials management plan, an occupational health and safety plan (OHSP), and an emergency response plan have been developed to manage risks associated with the handling of fuel, including the risk of fire. The OHSP addresses safety issues during both construction and operations. The Foreign Enterprise provides appropriate personal protective equipment, training of all site personnel, and has adopted standard safety procedures during all stages of the Project.

A Stakeholder Engagement Plan has been adopted to manage the concerns of the nearby community and other stakeholders. Land was acquired in a negotiated transaction from the previous landowner and the only person living on the site, has voluntarily taken up employment with the Borrower.

In order to manage the construction impacts to acceptable levels and ensure compliance with the IFC's Performance Standards and Guidelines, the Foreign Enterprise has prepared a traffic management plan and a construction management plan. The Engineering, Procurement, and Construction (EPC) Contractor has committed to complying with IFC's Performance Standards and Guidelines and ensuring that community impacts are minimized.

#### Social and Environmental Assessment and Management System

The Project has developed a social and environmental management system whose components will be further developed as the Project progresses. The Project has prepared an Environmental and Social Impact Assessment (ESIA), which met the requirements of both the World Bank Group's recommended ESIA process and the Senegalese regulations. The Foreign Enterprise has implemented an effective organizational structure to manage environmental and social risks. In addition, a preliminary Environmental and Social Management Plan (ESMP) has also been prepared to manage the Project's

	<p>environmental and social impacts. The Project has established a grievance mechanism to receive and address any concerns from the stakeholders. The Project team has prepared frameworks for monitoring and reporting on the environmental and social impacts.</p> <p><u>Environmental and Social Management Plan (ESMP)</u></p> <p>The Project’s detailed ESMP has been prepared and presents additional information on the monitoring of mitigation measures which have been designed to reduce Project’s impacts to acceptable levels and in compliance with IFC’s Performance Standards and Guidelines. Additionally, the Project will provide OPIC with annual reports summarizing the Project’s environmental and social performance and demonstrating compliance with the IFC’s Performance Standards and Guidelines. The Project will also be required to conduct an independent third party audit of its monitoring data to verify compliance with environmental and social covenants in the Common Terms Agreement (CTA).</p> <p><b>OPIC Site Visit:</b> OPIC staff undertook an environmental and social due diligence site visit from April 26 to 30, 2015. Meetings took place with the local Project team, the local community, IFC, and the local regulators.</p> <p><b>Community Consultations:</b> Several public consultation meetings have been held since August 2014 to identify the concerns of the nearby residents and other stakeholders regarding the Project. Formal and informal meetings are continuing between the Project team and the nearby community and school representatives through the already established stakeholder engagement process.</p>
Workers Rights	<p>OPIC’s statutorily required standard worker rights language will be supplemented with provisions concerning the right of association, organization and collective bargaining, minimum age, hours of work, the timely payment of wages, and hazardous work situations. The Foreign Enterprise will also be required to operate in a manner consistent with the requirements of the International Finance Corporation’s Performance Standard 2 on Labor and Working Conditions. Standard and supplemental contract language will be applied to all workers engaged by the Project.</p> <p>During the construction phase, there will be a maximum of 200 workers onsite at any given time with preference given to local hires. The vast majority of this workforce will be professional / technical workers, employed through the EPC, Wartsila, and its three to four</p>

	<p>subcontractors. Once operational, the Foreign Enterprise expects to employ 45 direct employees, of which 10% will be unskilled labor.</p> <p>Various grievance mechanisms are in place, including through the Collective Bargaining Agreement with relevant provisions under Senegalese law and an anonymous hotline; however, the Foreign Enterprise will be required to document, formalize and communicate these channels in an employee grievance policy that is consistent with IFC Performance Standard 2 that applies to all Workers of the Project, including contractors and subcontractors.</p> <p>OPIC issued a worker rights clearance for this project on May 6, 2015.</p>
Human Rights	<p>OPIC issued a human rights clearance for this Project on May 6, 2015.</p>
U.S. Effects	<p>The Project is not expected to have a negative impact on the U.S. economy, as it involves the generation of electricity that will be sold to the national grid in Senegal. U.S. procurement associated with this Project is expected to have a positive impact on U.S. employment. The Project is expected to have a negative five-year U.S. balance of payments impact.</p>