

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: PIDA2745

<b>Project Name</b>	Inga 3 and Mid-Size Hydropower Development TA (P131027)
<b>Region</b>	AFRICA
<b>Country</b>	Congo, Democratic Republic of
<b>Sector(s)</b>	Hydropower (100%)
<b>Theme(s)</b>	Regional integration (70%), Infrastructure services for private sector development (30%)
<b>Lending Instrument</b>	Technical Assistance Loan
<b>Project ID</b>	P131027
<b>Borrower(s)</b>	Ministry of Hydraulic Resources and Electricity
<b>Implementing Agency</b>	MRHE/ADEPI
<b>Environmental Category</b>	A-Full Assessment
<b>Date PID Prepared/Updated</b>	10-Dec-2013
<b>Date PID Approved/Disclosed</b>	09-Dec-2013, 10-Dec-2013
<b>Estimated Date of Appraisal Completion</b>	27-Nov-2013
<b>Estimated Date of Board Approval</b>	11-Feb-2014
<b>Decision</b>	

**I. Project Context**

**Country Context**

Sub Saharan Africa (SSA) is suffering from a sustained and chronic power crisis. Only 31percent of the population has access to electricity, leaving nearly 600 million people without energy access. The combined power generation capacity of SSA, excluding South Africa, is only 28 GW. Moreover, 25 percent of installed capacity is not operational for various reasons, including aging plants and lack of maintenance. Power outages cause losses in forgone sales and damaged equipment for firms with an economic cost ranging between 1 and 4 percent of Gross Domestic Product (GDP). The average power tariff, at \$0.12/kWh, is about twice the tariff in other developing countries. Yet, it only partially covers Africa's current average generation cost of \$0.18/kWh. Actual average cost of power to consumers is drastically weighted by the reliance on costly backup generators, representing up to half of total installed capacity in some countries.

Yet, SSA is blessed with large hydropower resources, which can contribute to significantly increase cost effective and clean energy supply. Hydropower generation cost (around \$0.05-0.07/kWh) compares very favorably with other technologies, including thermal, wind, and solar. Large scale hydropower development would displace thermal power plants that would otherwise be built, saving hundred millions of tons of carbon dioxide emissions per year. Hydropower resources are

concentrated in a small number of countries (DRC, Ethiopia, Cameroon, Angola, Madagascar, Gabon, Mozambique and Nigeria), but have a potential capacity well beyond what could either be consumed or financed domestically for the foreseeable future. Unleashing hydropower's transformative potential will require closer integration of Africa's power pools and transmission infrastructures needed to promote regional power trade.

DRC's hydropower can be a regional game changer and light up the African continent. DRC has an enormous hydropower potential estimated at 100 GW (equivalent to about 774 TWh per annum), the third largest country potential behind China and Russia. With 40 GW, Inga is the largest hydropower site in the world and one of the continent's most cost-effective power sources (estimated generation cost is \$0.03/kWh). The countries of the Southern Africa Power Pool (SAPP) constitute a natural market for DRC hydropower as DRC is already interconnected with the SAPP grid. South Africa is a creditworthy off-taker which can increase the bankability of hydropower projects in DRC.

Inga 3 Basse Chute (BC) is the next phase of the Inga site development with a 4,800MW installed capacity (Inga 1 and Inga 2 were built in the 70s and 80s). Inga 3 BC will not require construction of a dam on the Congo River. The project has been selected by the African Caucus as one of the hydropower projects in Africa demanding particular attention from the World Bank. In the weak investment and governance environment of DRC, the proposed project provides technical assistance to contribute to the development of Inga 3 BC and mid-size hydropower projects in a manner that maximizes their impact on ending extreme poverty and promoting shared prosperity.

The Prime Minister of the DRC sent a Policy Letter to the President of the World Bank setting out principles for developing Inga-3 BC as follows: (a) timely set-up of Grand Inga Authority to manage Inga developments, (b) allocation of electricity, (b) the preferred PPP structuring option for the Inga 3 development (with public financing to common infrastructure), (c) adherence to a competitive tender process for developer using transparent quantitative criterion (cost per kWh) with pass/fail for financing plan, (d) a commitment to define tax regime & water tariffs before RFP launch, and (e) commitment to international environmental and social standards. The Policy Letter forms a "compact" between IDA and the DRC and outlines the conditions of engagement.

## **Sectoral and institutional Context**

### **II. Proposed Development Objectives**

The proposed Project Development Objective (PDO) is to contribute to the sustainable development of Inga 3 Basse Chute (BC) and selected mid-size hydropower projects.

### **III. Project Description**

#### **Component Name**

Component A – Inga 3 BC development support

#### **Comments (optional)**

This component will build on the feasibility study for the development of the Inga site and associated interconnections financed in 2010-13 by the African Development Bank (AfDB).

#### **Component Name**

COMPONENT B – Mid-size hydropower development support

**Comments (optional)**

The component aims to develop midsize hydropower by selecting potential projects, performing prefeasibility studies, accompanying bidding processes, and evaluating possibilities for carbon finance

**IV. Financing (in USD Million)**

Total Project Cost:	106.50	Total Bank Financing:	73.10
Financing Gap:	0.00		
<b>For Loans/Credits/Others</b>			<b>Amount</b>
BORROWER/RECIPIENT			0.00
IDA Grant			73.10
African Development Bank			33.40
SOUTH AFRICA Development Bank of Southern Africa (DBSA)			0.00
Total			106.50

**V. Implementation**

**VI. Safeguard Policies (including public consultation)**

<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04	x	
Forests OP/BP 4.36	x	
Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11	x	
Indigenous Peoples OP/BP 4.10	x	
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37	x	
Projects on International Waterways OP/BP 7.50	x	
Projects in Disputed Areas OP/BP 7.60		x

**Comments (optional)**

**VII. Contact point**

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