

**PROJECT INFORMATION DOCUMENT / INTEGRATED SAFEGUARDS DATA  
SHEET (PID/ISDS)  
CONCEPT STAGE**

Report No.:PIDISDSC16563

Date Prepared/Updated: 20-Dec-2016

**I. BASIC INFORMATION**

**A. Basic Project Data**

<b>Country:</b>	Cameroon	<b>Project ID:</b>	P157733
		<b>Parent Project ID (if any):</b>	
<b>Project Name:</b>	Hydropower Dev. on the Sanaga River Proj (P157733)		
<b>Region</b>	AFRICA		
<b>Estimated Appraisal Date:</b>	28-Feb-2017	<b>Estimated Board Date:</b>	5-May-2017
<b>Practice Area (Lead):</b>	Energy & Extractives	<b>Lending Instrument:</b>	Investment Project Financing
<b>Borrower(s)</b>	Republic of Cameroon		
<b>Implementing Agency</b>	Electricity Development Corporation (EDC), Ministry of Water and Energy (MINEE)		
<b>Financing (in USD Million)</b>			
<b>Financing Source</b>			<b>Amount</b>
BORROWER/RECIPIENT			0.00
International Development Association (IDA)			25.00
Financing Gap			0.00
Total Project Cost			25.00
<b>Environmental Category</b>	A-Full Assessment		
<b>Concept Review Decision</b>	Track II - The review did authorize the preparation to continue		
<b>Is this a Repeater project?</b>	No		
<b>Is this a Transferred project? (Will not be disclosed)</b>	No		
<b>Other Decision (as needed)</b>			

**B. Introduction and Context**

**Country Context**

Cameroon is a medium-sized (475,650 km<sup>2</sup>) country in Central Africa with a population of about 23.3 million in 2015, growing at around 2.5 percent per annum. Cameroon's Gross National Income (GNI) per capita stood at US\$ 1330 in 2015, making it a lower-middle income country. Cameroon has vast

natural resources, including oil and gas, minerals, agricultural land, water resources and forests with remarkable biodiversity, which provide a potential basis for development. However, economic growth averaged 3.3 percent per annum between 2003 and 2007, and the economy was negatively affected by the global financial crisis of 2009, which led to weaker demand for Cameroon's non-oil exports. More recently, GDP growth rates have increased, reaching 4.2 percent in 2011, 4.6 percent in 2012, 5.6 percent in 2013, and 5.9 percent in 2014, respectively. In 2015, despite a sharp decline in the international oil price and rising insecurity in the far north of the country, GDP growth reached 6.2 percent thanks to a rebound in oil production and continued efforts on public investment projects.

In order to reduce poverty and foster shared prosperity, over the next years Cameroon's main challenge will be to significantly accelerate economic growth and scale up investments while implementing policies that will ensure that the benefits of growth are shared. This will require significant improvements in the investment and business climate, important investments in infrastructure, better governance, and more efficient public spending, as well as fiscal policies that specifically target the needs of the poor. Moreover, economic policies will require a more stringent focus on resolving a number of sectoral bottlenecks in the energy, agriculture, telecommunications, mining, and transport sectors to allow broader and more efficient exploitation of the country's resource potential.

### **Sectoral and Institutional Context**

Starting with the Electricity Law in 1998, the GoC implemented a first phase of far-reaching policy and structural reforms to address a number of pressing governance issues that were stifling the urgently needed investment generation capacity and distribution. As a result, the sector regulator (ARSEL) and rural electrification agency (AER) were established and, in 2001, the state-owned, vertically-integrated power utility (SONEL) was privatized through the sale of a 56 percent equity stake and the award of a 20-year concession to AES Corporation. In the decade following its privatization, SONEL gradually evolved from a loss-making government utility to an income-generating enterprise while mobilizing significant investments in new generation capacity and connections. By 2011, private sector financing had boosted Cameroon's power capacity by 30 percent, the number of connections had expanded by 75 percent, and the electrification rate had increased from less than 15 percent to nearly 50 percent.

While the privatization unleashed significant new investment during the first decade of the concession period, from 2011 on both sector investment and performance started stalling. Most importantly, a continued lack of investment led to the sector's transmission backbone becoming a critical bottleneck to the further expansion of power generation capacity, in particular with regard to the development of remote hydropower sites on the Sanaga River. After a prolonged period of dwindling returns and sector performance, AES Corporation finally sold its equity stake in AES-SONEL to the private equity company ACTIS Capital LLP (ACTIS). For the remaining period of the concession (2014-2021), ACTIS committed to comply with all previous obligations by AES-SONEL (renamed to ENEO CAMEROON S.A.) within its concession, including the accelerated ramp-up of hydroelectric power and a number of critical rehabilitation and renovation works.

To reinvigorate investment and sector performance, and to foster new investments into the transmission system, the Government of Cameroon (GoC) initiated a second phase of reforms including the 2011 "New Electricity Law". Key changes under the legislation included: (i) the transfer of the transmission network management from ENEO to a state-owned entity; (ii) changes to water storage activities, including the transfer of the water storage concession of the Sanaga basin reservoirs to the Electricity Development Corporation (EDC); and (iii) the introduction of new penalty charges in the event that ENEO fails to meet agreed performance targets.

In parallel, in 2014, the Government approved an updated least cost Electricity Sector Development

Plan covering the period 2015 – 2035 (PDSE 2035). The plan – developed with IDA assistance - aims to reduce the energy deficit and ensure long-term energy security. The plan proposes an energy mix which takes advantage of Cameroon’s hydropower potential (estimated at 12,000MW) as well as its domestic gas reserves. PDSE 2035 confirms that domestic gas resources will need to be developed to complement hydropower. Gas-fueled power generation can. PDSE 2035 confirms the complementarities between hydropower and gas-fired generation in Cameroon, as domestic gas-fired generation: (a) bridge the supply gap before additional hydropower will become available; and (b) ensure reliant power supply in the dry season; and (c) provide an affordable insurance against hydrological risk.

The Lom Pangar reservoir is currently being fully impounded in 2016 and will increase hydropower generation capacity and reduce seasonal variability of water flow in the Sanaga River. The Lom Pangar regulating dam already improves, in the short term, the production capacity of the two existing hydropower plants downstream—Song Loulou and Edéa and unlock the hydro potential of the Sanaga River (estimated at up to 6,000 MW) by reducing seasonal variability flow. As most of the hydropower sites cannot operate year round without Lom Pangar, the cost of electricity generation would simply be too high to attract interest from developers. Over time, development of the Sanaga hydropower potential will lower electricity production costs in Cameroon through the gradual replacement of thermal energy.

The potential hydropower sites downstream of Lom Pangar are among the most attractive power assets in Cameroon. Lower electricity generation costs - and resulting lower electricity tariffs - will spur economic growth in a number of ways. First, it will facilitate affordable household energy access. Second, it will stimulate development of value-added activities in Cameroon's broader economy.

In Cameroon, the Bank Group has a long track record of working in partnership with the Government and has become a trusted advisor and investment partner to improve the performance of the energy sector. Through a combination of policy advice, technical assistance, and investment lending, the Bank has over the years developed regulatory and planning capacities and assisted in the establishment of a regulator and rural electrification agency. Through private and public investments, the Bank Group has also supported a number of independent power producers, and is currently contributing to an increase in hydropower production including support to the Nachtigal hydropower project (420 MW), which is the first development on the Sanaga River that will benefit from the Lom Pangar regulating dam, also supported by the Bank. This partnership has resulted in current and potential increases in the availability of least cost, cleaner, electricity.

The proposed project supports the Government’s Vision 2035 and its Growth and Employment Strategy 2010-2019 to achieve shared growth, reduce poverty, and create jobs through increased industrialization, improved productivity, and better governance. It is aligned with the World Bank’s twin goals by contributing to reducing extreme poverty and boosting shared prosperity through support for timely implementation of policy reforms and investments to reduce load shedding, expand low-cost electricity generation and supply, improve sector governance, cut transmission losses, and foster economic growth. The project is also aligned with the World Bank’s 2015 Systematic Country Diagnostic discussed by the Board in June 2016, which identified improving reliability, availability, and access to clean energy as the highest ranked—and most feasible—intervention to address poverty reduction. This is being incorporated into the new Country Partnership Framework for Cameroon, which is under preparation

### **C. Proposed Development Objective(s)**

#### **Development Objective(s) (From PCN)**

The project development objectives (PDO) are to develop a comprehensive legal and regulatory framework for the development of hydroelectricity in the Sanaga river basin that enable private sector participation under competitive basis and to assist the Government of Cameroon in the implementation of its first transaction.

### **Key Results (From PCN)**

Progress toward achieving the PDO Outcomes will be measured by the following Project Outcome Indicators:

- availability of the bidding documents for the selection of a developer for a hydropower project (Y/N)
- amount of private capital leveraged (US\$ million), value in \$/MW installed
- hydrological risk mitigation mechanisms identified and in place (Y/N)
- Dam safety framework adopted and ready for implementation (Y/N)
- project beneficiaries (number), of which female (50%)

## **D. Concept Description**

The proposed project will consist of seven components: (i) Technical Assistance (TA) for the cost-efficient competitive development of a new hydropower project on the Sanaga River under a PPP model; (ii) support the GoC to supervise the implementation of the Nachtigal Hydropower Project; (iii) establishment of hydrological risk mitigation mechanisms; (iv) implementation of a dam safety framework; (v) support to the GoC in the concessioning of hydroelectric assets developed and financed by the State; (vi) implementation of an optimized water management organization for hydroelectric purposes; and (vi) capacity building and support to the implementation of the Proposed project.

## **II. SAFEGUARDS**

### **A. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)**

As the TA activities will not have any direct environmental and social impacts, the expected future hydropower investments may cause large scale social and environmental impacts. With regard to the Sanaga Basin ecosystem diversity, the hydropower investment site and the associated transmission lines might be located or cross sensitive agro ecological areas, thus the selection of the final site will require careful analysis, consideration of alternative sites that avoid large settlements of people and significant environmental negative impacts. Appropriate mitigation measures including globally recognized best environmental and social management practices will be defined in the safeguards instruments that will be financed through this TA. These instruments will guide future investments on the Sanaga River.

The specific Project location of the new Hydropower Project will only be known once the optimization study of hydroelectric potential of the Sanaga river is completed and the GoC has chosen the site to be developed under the proposed Project. This is expected to be about 12 to 18 months after Project effectiveness.

### **B. Borrower's Institutional Capacity for Safeguard Policies**

The two potential implementing agencies for this TA, namely Ministry of Water and Energy and

Electricity Development Corporation, are familiar with the World Bank Safeguards policies as they have implemented several projects financed by the World Bank. The implementation of these projects has created solid environmental and social management capacity within these institutions. Nevertheless, an in-depth environmental and social capacity assessment will be carried out during the preparation of the project in order to identify specific areas for improvement or strengthening.

More broadly the country has stable environmental and social institutions namely the Ministry of the Environment, Nature Protection and Sustainable Development, the Ministry of Domain, Cadastral and Land Registration Affairs, and Ministry of Social Affairs. The Country has also a comprehensive environmental and social legal framework including the 1996 Environmental Law and its implementation decrees. A new Environmental and Social Impact Assessment decree was signed in 2014. However, the environmental and social law enforcement can be strengthened and specific measures will be defined during the TA implementation.

### C. Environmental and Social Safeguards Specialists on the Team

Emeran Serge M. Menang Evouna (GEN07)

Kristyna Bishop (GSURR)

### D. POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The overall project has been categorized as Category A especially due to its intention to finance technical studies that will facilitate the identification of a new hydropower project site. In addition the TA intends to support the supervision of the implementation of the Nachtigal Hydropower Project which is a High risk environmental project.</p> <p>Once the dam site has been selected by the GoC, the TA will finance the preparation of the ESIA for the selected site and the ESIA for the transmission line to be constructed from the site to the existing interconnected grid. The ESIA will also include a cumulative impact assessment on downstream environments. Draft ToRs for the ESIA's will be prepared and discussed with the main stakeholders prior to project appraisal.</p> <p>Further, the TA will support the preparation of a Strategic Environmental and Social Assessment (SESA) for the development of hydroelectricity in the Sanaga river basin. Draft ToRs will be prepared and discussed with the main stakeholders prior to project appraisal.</p> <p>Finally, an environmental and social expert panel will be set up to advise Cameroon on the environmental</p>

		<p>and social aspects of the selected project. Draft ToRs for the Panel of Experts will be prepared and disclosed prior to project appraisal.</p> <p>In addition to the ESMP resulting from the ESIA, a robust Environmental and Social Contractors guidelines will also be prepared for the bidding documents purpose.</p>
Natural Habitats OP/BP 4.04	TBD	The ESIA's that will be prepared will carry out an in-depth assessment of the main threats of natural habitats along the Sanaga River. Specific guidance will be provided to avoid significant conversion or degradation of any critical natural habitats. Should any unavoidable risk of conversion arise, proper additional plan/measures will be prepared to compensate.
Forests OP/BP 4.36	YES	The project doesn't support commercial forest exploitation. However, the ESIA's that will be financed through the project will assess and provide relevant guidance to consider during the site selection to be followed to avoid or reduce potential negative impact on health and quality of forest.
Pest Management OP 4.09	YES	Relevant measures will be provided in the ESIA's, and an Integrated Vector Management Plan (IVMP) will be prepared to prevent and address waterborne health risks associated to dam reservoirs in the project area.
Physical Cultural Resources OP/BP 4.11	YES	During the ESIA process, as it was the case in the Lom Pangar Hydropower Project, particular attention will be drawn placed on Physical cultural Resources and relevant mitigation measures proposed if needed. A comprehensive chance find procedure will be prepared as part of the ESIA reports, embedded in the overall ESMPs, to that end.
Indigenous Peoples OP/BP 4.10	TBD	Once a site has been selected, a social assessment will be carried out and the relevant instrument will be prepared, consulted and disclosed if there are indigenous peoples meeting the 4 criteria in the project area. An IPPF was prepared for the Electricity Transmission and Reform project and it could be used to guide the preparation of an IPP for this project as it was focused specifically on the screening for indigenous peoples along proposed transmission lines.
Involuntary Resettlement OP/BP 4.12	Yes	A social assessment (SA) and RPF will be prepared as part of the TA. The RPF will be used, in conjunction with ESIA's, to guide the site selection and future implementation of the investments. TORs for both SA and RPF will be prepared and disclosed

		prior to project appraisal.
Safety of Dams OP/BP 4.37	Yes	<p>The TA project will support the development of a hydropower project which will probably include a large dam. The TA will finance engineering activities including geological and geotechnical investigations, topographical surveys, bathymetry, physical scale modeling, hydrology, and sediment management. These data will allow the preparation of a geological baseline report and will be integrated into a “Reference Project” that will serve as the expression of needs of GoC and will be included in the bidding documentation for the concession.</p> <p>An Emergency Response and Preparedness Plan (ERP) for the Sanaga River Hydropower development will be prepared with the support of the TA. The draft ToRs will be prepared and consulted upon, then disclosed prior appraisal.</p> <p>In addition, a dam safety panel of experts will be recruited. It will comprise three to five specialists (geotechnical, concrete, sediment, dam, hydro-electro-mechanics (HEM)). Draft ToRs for the recruitment of such Panel will be prepared prior to project appraisal.</p>
Projects on International Waterways OP/BP 7.50	No	The Sanaga River is not an International water body, therefore, this Policy does not apply.
Projects in Disputed Areas OP/BP 7.60	No	There are no disputed areas in the project areas.

## E. SAFEGUARD PREPARATION PLAN

### 1. Tentative target date for preparing the Appraisal Stage ISDS:

15-February-2017

### 2. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal-stage ISDS.

Activities under the Project are not expected to induce adverse, irreversible environmental and social impacts. However, potential impacts could be generated by the subsequent implementation of the selected hydropower project that is being prepared. The relevant ToRs identified for each of the policies above will be prepared and validated prior to project appraisal.

## III. Contact point

### World Bank

Contact: Stephan Claude Frederic Garnier

Title: Lead Energy Specialist

### **Borrower/Client/Recipient**

Name: Republic of Cameroon

Contact: Paul-Louis Motaze

Title: Minister of Economy, Planning and Regional Development

Email: lpmcam31@yahoo.fr

### **Implementing Agencies**

Name: Ministry of Energy and Water (MINEE)

Contact: Dr. Basile Atangana Kouna

Title: Minister

Email: Cabinet.minee@gmail.com

Name: Electricity Development Corporation (EDC)

Contact: Theodore Nsangou

Title: General Director

Email: theonsangou@yahoo.fr

### **IV. For more information contact:**

The World Bank

1818 H Street, NW

Washington, D.C. 20433

Telephone: (202) 473-1000

Web: <http://www.worldbank.org/projects>

### **V. Approval**

Task Team Leader(s):	Name: Stephan Claude Frederic Garnier	
<i>Approved By:</i>		
Safeguards Advisor:	Name: Maman-Sani Issa	Date: 12/07/2016
Practice Manager:	Name: Charles Cormier	Date: 12/20/2016
Country Director:	Name: Elisabeth Huybens	Date:

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.