Program Information Documents (PID)

Appraisal Stage | Date Prepared/Updated: 02-Jun-2023 | Report No: PIDA260421

BASIC INFORMATION

A. Basic Program Data

Country	Project ID	Program Name	Parent Project ID (if any)
Cameroon	P178136	Cameroon Power Sector Reform Program	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
WESTERN AND CENTRAL AFRICA	28-Apr-2023	03-Aug-2023	Energy & Extractives
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Program-for-Results Financing	Republic of Cameroon	Ministry of Water and Energy (MINEE)	

Proposed Program Development Objective(s)

The Program's Development Objective is to improve financial performance and transparency of the electricity sector, and increase access to electricity in Cameroon.

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	1,381.00
Total Operation Cost	945.00
Total Program Cost	925.00
IPF Component	20.00
Total Financing	945.00
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	300.00
World Bank Lending	300.00
Total Government Contribution	645.00

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

1. **Cameroon is a lower-middle-income country located in the Central part of Sub-Saharan Africa along the Atlantic Ocean.** It has a surface of 475,440 km² and a population of almost 25.9 million. It is the largest economy in Central Africa, with a gross domestic product (GDP) per capita of US$1,491, and vast natural resources such as oil, gas, minerals, agricultural land, and forests. In the last decade, the population rose by 2.5 percent per year, with an average density of 56.2 person per square km of land area, although with a much higher density in large urban centers (Douala, Yaoundé, and Garoua) and in the Western and Northern regions. The country is also facing a security crisis in the Northwest and Southwest regions as a result of socio-political problems, on the one hand, and in the Far North region, which has been affected by attacks by the Boko-Haram terrorist sect, therefore inhibiting economic activity.

2. **Cameroon's economy continued expanding in 2022, after growing by 3.6 percent in 2021, although at a slower pace.** Real GDP growth reached 3.4 percent in 2022 supported, on the supply side by liquefied natural gas exports, agri-food industries, construction, and services. However, households' consumption and private investment shrank substantially amid sustained high inflation and tightening global financial conditions. Inflationary pressures were further amplified, hiking by 7.6 percent year-on-year at the end of September 2022, driven by soaring food prices. Domestic energy prices remained contained amid large fuel subsidies (about US$1 billion for 2022) by the Government of Cameroon (GoC). The fiscal deficit is expected to have dropped to 1.8 percent in 2022, as GoC cut capital expenditures and delayed some current expenditures to accommodate for higher fuel subsidies. Inflation was 6.3 percent in 2022 but should remain below 3.0 percent in the medium term, reflecting the results of monetary policy tightening.

3. **The National Development Strategy 2020–2030 ('NDS-30') identifies the need for fiscal consolidation and structural reforms, including in the electricity sector, to promote inclusive growth and economic development.** NDS-30, launched in 2020 by the Government of Cameroon, acknowledges the central role of the electricity sector to achieve the country's industrialization objectives. In addition, NDS-30 aims to improve access to basic social services, strengthen climate change adaptation and mitigate the effects of climate change, and improve the country's governance to achieve development goals. Against the backdrop of increased fiscal consolidation, the Government of Cameroon is focused on key reforms to improve financial sustainability of the electricity sector to reduce its impact on fiscal deficit of the sector.

Sectoral and Institutional Context

4. **Over the last 20 years, GoC has spearheaded a series of structural reforms to improve sector efficiency and attract private investments in the electricity sector.** In 2001, the vertically integrated public utility SONEL was privatized, becoming AES-SONEL. The utility became a concessionaire responsible for operating the generation, transmission, system operation, distribution, and retail segments. In 2011, GoC enacted the New

Electricity Law, which introduced key reforms, including (a) unbundling of the transmission sub-sector from the scope of the concession due to the inability of the concessionaire to fulfill its contractual obligations in the transmission segment and transferring of the transmission and system operation activities to a state-owned national electricity transmission company (*Société Nationale de Transport de l'Eléctricité du Cameroun*, SONATREL); (b) new governance arrangements for water storage, including the transfer of the water storage concession of the Sanaga Basin reservoir to a dedicated state-owned company, the Electricity Development Corporation (EDC); and (c) a new tariff regime. In 2014, the British-owned private equity firm Actis became the majority shareholder of AES-SONEL, and the company was renamed Energy of Cameroon S.A or ENEO, in charge of the development of the generation, distribution, and retail segments.

5. **In 2022, around 74 percent of energy produced from the country's 1,500 MW available installed generation capacity came from hydropower sources; however, 26 percent of the annual production was from thermal due to wide variations in hydrology from year to year and inadequate transmission infrastructure.** Despite reform efforts and huge hydropower potential, significant challenges remain in the electricity sector such as inadequate planning with uneven access rates linked to insufficient distribution and transmission infrastructure. Electricity access rate in Cameroon stands at 65 percent[1] with significant disparities between urban (94 percent) and rural (25 percent) areas. GoC aims to achieve a 90 percent access rate by 2030 according to its NDS-30. However, several barriers remain to achieve this goal: (a) inadequate planning and multiplicity of stakeholders implementing access projects without clear roles and boundaries; (b) absence of modern tools, for example, a centralized georeferenced database to monitor progress, (c) delays in project implementation as a result of low levels of readiness; and (d) poor maintenance of the distribution network.[2] The Program under preparation will support the incorporation of crucial planning tools, such as a Power System Master Plan.

6. **The electricity sector in Cameroon is not entirely financially self-sufficient and is subsidized by the Government with associated fiscal impacts on its budget.** For 2022, the GoC's subsidy to the sector (known as tariff compensation) represented 1.7 percent of the total annual budget compared to 0.3 percent budgeted for the social sector and 17.0 percent[3] on fuel subsidies. Overall, budgeted expenditures in the electricity sector in 2023 represent 5 percent of the total budget. In addition, poor operational performance in transmission and distribution, coupled with lack of payment discipline of subsidies and bills by public agencies and weak sector regulation, have further hampered the financial viability of the electricity sector in Cameroon. In this context, the World Bank supported the preparation of a cost-of-service study under the ongoing PASA, which informed the tariff reform actions to be taken by the regulator. Consistent with outcomes of the study, GoC has begun the tariff reform process to bring MV and HV customers to the right tariff levels (cost of service), keeping subsidies applied to LV customers.

7. **Private sector participation is expected to be increasingly important in the Cameroonian electricity sector.** In this context, the arrival of low-cost energy from Nachtigal in 2024 will be a game changer in the electricity sector given its expected contribution to the generation mix.[4] Nachtigal will be the third IPP in the sector, and its power purchase agreement (PPA) with ENEO is designed as a take-or-pay contract. Any inability to connect the supply of energy from the plant to demand coupled with the associated fixed charges in the

[1] Source: Tracking SDG7 2020 data.
[2] As identified in the World Bank-supported Cameroon Energy Sector PASA.
[3] Source: Ministry of Finance (MINFI).
[4] 30 percent of generation.

PPA is likely to have a negative impact on the financial sustainability of the sector in the short term until key infrastructure such as RIS-RIN is completed. Poor payment discipline and accumulation of arrears would only exacerbate the fragile sector situation. This emphasizes the need for structural reforms in tariff regulation, sector planning for timely investments, and good payment discipline. The proposed PforR supports the GoC in implementation of these key reforms.

PforR Program Scope

8. **The proposed PforR Program is designed as a subset of the GoC's program and supports its priority areas.** It will support tariff adjustments for MV and HV clients to move toward cost-recovery and timely payment of electricity consumption of public facilities under Priority 3 ('Towards a financially sustainable electricity sector'). It will also strengthen the regulatory monitoring of the distribution company's performance to strengthen its accountability and incentivize its performance under Priority 4 ('Improving performance of electricity sector operators'). The proposed PforR Program will provide strong support to Priority 5 ('Increasing electricity access rate') by enabling the approval of a robust Electrification Master Plan, leading to the connection of 211,000 households to the grid. In addition, the increase of transmission capacity to remove existing bottlenecks will be prioritized to improve the quality of supply and attract well-paying industries as ENEO customers under Priority 6 ('Increasing industrial electricity consumption'). Particular emphasis will be given to technical assistance and capacity-building activities financed by the IPF component to support Priority 7 ('Human capital and local skills development').

9. The Program will support the implementation of activities designed to achieve the Government's goals under the Cameroon Electricity Sector Recovery Plan (CESRP) in the following result areas (RA):

- **(a) RA 1: Improved financial performance of the electricity sector.** To achieve this objective, the Program will support activities to increase liquidity in the sector by (a) reducing the gap between allowed electricity sector costs and tariff revenues through gradual increases in tariffs of MV and HV customers until cost-recovery is reached; (b) improving regular payments of the residual tariff subsidy, that is, compensation from MINFI to ENEO; and (c) ensuring timely payments to ENEO of electricity bills of public buildings' consumption by enhancing the metering and billing accuracy and transparency.
- **(b) RA 2: Strengthened operational performance, enhanced accountability and transparency of the sector.** The Program will support closer monitoring by ARSEL and MINEE of the performance of the electricity distribution concessionaire, ENEO, and the transmission company SONATREL. The Program is expected to enable ARSEL to complete a technical audit (including a physical inventory of assets in the concession) on ENEO's annual performance report, provide recommendations to be implemented, and make the report available to the public. In addition, ARSEL is expected to approve a SONATREL's investment plan 2024-2028, including tools to improve SONATREL's performance. The investment plan will be incorporated in SONATREL's updated performance contract to be signed with the GoC. These measures will be critical to increase trust among sector stakeholders, which is a steppingstone to improve operational performance.
- **(c) RA 3: Increased access to electricity.** To achieve this objective, the Program will support investments to increase access to electricity to households and industries in urban and rural areas and reduce thermal generation with solar PV. Thus, the Program is expected to bring electricity to 211,000 households and benefit over 1 million people. In addition, the Program will target investments aimed at increasing installed and available transformation capacity in the existing substations by at least 2 percent per year, to maximize positive impacts on quality and

reliability of transmission services while at the same time minimizing safeguards risks. These investments will enable industries currently relying on generators to sustain their businesses to be connected to the national grid. Lastly, the Program will support the addition 22 MW of solar PV generation capacity in the sites of existing diesel fired thermal plants with low installed capacity (1-2 MW each), which supply electricity to isolated systems or to the national interconnected system, to replace part of thermal production with solar PV generation. This arrangement is known as "hybridization" of thermal plants, and has clear economic advantages, as well as reduction of local pollution and of CO2 emissions.

10. **Excluded activities.** The Program will not support the construction or upgrades of (a) large power plants such as hydropower plants and utility-scale solar PV plants or (b) transmission lines and new HV substations. The Program will not support activities that are likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people. Any infrastructure investment activity that will entail conversion or degradation of critical natural habitats or critical cultural heritage sites, impact indigenous peoples or cause land acquisition or the use of forced evictions are excluded.

C. Proposed Program Development Objective(s)

Program Development Objective(s)

11. The PDO is to improve financial performance and transparency of the electricity sector, and increase access to electricity in Cameroon.

12. The following outcome indicators will be used to measure achievement of the PDO:
    (a) Reduction of annual revenue gap between maximum allowed revenues and tariff revenues (%);
    (b) Timely payments of public administration's electricity consumption and annual compensation (%);
    (c) Public disclosure of annual audits of ENEO performance reports (Yes/No);
    (d) People provided with new or improved electricity service (CRI, Number):
        (i) People provided with new or improved electricity service - Female (CRI, Number).

D. Environmental and Social Effects

13. **The proposed PforR would have positive environmental and social impacts.** It would reduce electricity consumption in public buildings and public lighting and thermal generation. The phaseout of diesel for power generation, reduction of electricity consumption, and investment in solar power generation will contribute to the reduction GHG emissions in the country. Thus, the Program would also contribute to improving access to electricity through last-mile connections and would enable the poor and most vulnerable and disadvantages peoples (including indigenous populations) to benefit from improved access to affordable electricity. Moreover, achievement of the Program's financial sustainability will improve the quality of electricity supply to households and businesses and would create job opportunities. The improved financial and operational transparency would help enhancing citizens' trust and improve regular electricity bill payments.

14. The ESSA found that the environmental and social (E&S) risks are Substantial. They are related to the potential impacts of the works and reforms to be financed under the PforR. Works comprise capacity increase of HV substations, new connections, hybridization of existing thermal generation facilities and supply to isolated systems to serve currently unelectrified areas, smart meters for public buildings and public lighting and rehabilitation and extension of distributed networks operating at 15 kV or lower voltages (densification) and service connections.

15. In addition, the environmental risk rating of the IPF component is assessed as Moderate, and its social risk is assessed also assessed as Moderate.

16. Communities and individuals who believe that they are adversely affected as a result of a Bank supported PforR operation, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance redress mechanism or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts (With IPF Component for PforR)

17. **The environmental and social risk rating of the IPF component is Moderate.** The main environmental and social risks, as directly associated with the IPF component, are mostly potential downstream negative impacts of studies and plans. Social risks include (a) inadequate management of human resources for project workers and possible SEA/SH[5] in the work and communities' environment comprising the PIU, IVA, owner's engineer, and other contractual workers; and (b) inadequate stakeholder engagement, including grievances management; and (c) potential downstream social negative impacts of plans and studies, when they are implemented. On the environmental side more specifically, the risks

[5] SEA/SH = Sexual exploitation and abuse/sexual harassment.

include occupational health and safety risk related to the construction of a training center (Center of Excellence), and the generation of waste products from construction and e-waste that may affect the natural environment.

18. **To avoid, minimize, or mitigate these potentially negative impacts, the borrower, with the support of the World Bank, shall**
    (a) Ensure that the ToR for the preparation of the studies, plans, and other activities being supported by the IPF component incorporate the principles and requirements set out in the World Bank's Environmental and Social Standards (ESS) 1–10. The World Bank's environmental and social specialists will review and provide 'no objection' to such ToRs and outputs;
    (b) Strengthen stakeholder engagement, through public disclosure and consultations, around the proposed activities supported by the IPF component. The SEP will be disclosed on the World Bank's website and the Government's site before appraisal;
    (c) Establish, publicize, maintain, and operate an accessible grievance mechanism within 30 days of the effective date of the Operation;
    (d) Prepare a Labor Management Plan with suitable measures to avoid and address any GBV: SEA/SH in the work environment and communities and a GRM for workers within 60 days of the project's effectiveness;
    (e) Prepare, consult, disclose, adopt and implement an Environmental and Social Management Plan for the construction of the center of excellence, consistent with the relevant ESSs, including GBV: SEA/SH management, no later 60 days of project effectiveness.

E. Financing

19. The Program consists of three Results Areas (RA). Table 1 provides the breakdown of the Program financing by RAs. Of the total Program financing of US$925 million, RA 1 accounts for 61.5 percent, RA 2 for 0.5 percent, and RA 3 for 38.0 percent. RA 1 involves support to cover the gap between recognized sector costs and tariff revenues and significant investments in metering of public facilities and public lighting. RA 2 involves the regulator's expenditures to carry out ENEO's performance audits and yearly verification of what was done to address recommendations from previous ones. RA 3 comprises large investments in distribution grid extension, densification and household connections, and solar PV for hybridizing thermal power generation and investments for the rehabilitation and upgrade of existing transmission infrastructure.

Table 1. Program financing parameters

RAs	Sub-Total (US$ millions)	Share of PforR Program (%)
RA 1	569	61.5
RA 2	5	0.5
RA 3	351	38.0
Sub-total	**925**	**100.0**

F. IPF component

20. **Component 1: Implementation support and capacity building**. This component will support the implementation of the Program and provide capacity building to key sector agencies. The component will

finance: (i) the creation of a PIU, which will provide overall coordination support for the implementation of PforR activities and be the secretariat of the Inter-ministerial Committee, (ii) an owner's engineer to provide support to the implementing agencies in the preparation of technical bidding documents and supervision of works under the infrastructure investments in distribution (access), transmission, and generation (installation of solar PVs); and (iii) technical assistance and consultancy services to MINEE, ARSEL, SONATREL, AER, and EDC, and (iv) construction of targeted recipient infrastructure to host a Center of Excellence for technical trainings of sector professionals. Under this component, the use of World Bank's procurement procedures will enable the GoC to attract world-class consultancy services and strengthen local capacity.

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Borrower/Client/Recipient

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Implementing Agencies

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