



Program Information Document (PID)

Concept Stage | Date Prepared/Updated: 21-Mar-2022 | Report No: PIDC260397



BASIC INFORMATION

A. Basic Program Data

Country Cameroon	Project ID P178136	Parent Project ID (if any)	Program Name Cameroon Power Sector Reform Program
Region AFRICA WEST	Estimated Appraisal Date 14-Nov-2022	Estimated Board Date 23-Feb-2023	Does this operation have an IPF component? Yes
Financing Instrument Program-for-Results Financing	Borrower(s) Republic of Cameroon	Implementing Agency Ministry of Water and Energy (MINEE)	Practice Area (Lead) Energy & Extractives

Proposed Program Development Objective(s)

The Program's Development Objectives (PDO) are to improve financial sustainability of the power sector, increase access to electricity and improve quality of service.

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	900.00
Total Operation Cost	300.00
Total Program Cost	269.25
IPF Component	30.00
Other Cost	0.75
Total Financing	300.00
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	300.00
World Bank Lending	300.00



Concept Review Decision

The review did authorize the preparation to continue

B. Introduction and Context

Country Context

- 1. Cameroon is a lower-middle-income country (LMIC) 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 inhabitants. It is the largest economy in Central Africa with a GDP per capita of US\$1,527, and blessed with 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 sq. 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 North-West and South-West 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 has weak social indicators and has been negatively impacted by the COVID-19 pandemic.** Poverty remains high in the country with around 25.3 percent of the population (25 percent of women) living in extreme poverty, with less than US\$1.90 per day in 2018. Poverty incidence is much higher in rural areas (56.8 percent), compared to urban areas (9 percent) and a stark economic and social divide affects the country. The COVID-19 crisis has increased the poverty rate by 0.82 percentage points, reversing much of the progress in poverty reduction achieved in recent years. Inequality levels are also high, with 13 percent of the national income shared by the poorest 40 percent of the population, while 35 percent of the income is shared by the richest 10 percent of the population. The country is performing below expectations given its status as a LMIC. For example, in 2020, three in every five Cameroonian (63 percent) had access to electricity, compared to 88 percent for LMICs. Cameroon ranks 153 out of 189 countries for the Human Development Index with an HDI value of 0.563. The Gender Development Index, accounting also for gender inequalities as based on the HDI, shows the country to be slightly below the Sub-Saharan average, with Cameroon ranking 141 out of 162 countries for the Gender Inequality Index for the most recent, 2019 assessment.¹
- 3. Cameroon's economic growth decelerated in 2020 but has picked up since the beginning of 2021.** Real GDP growth decelerated to 0.5 percent in 2020, from 3.7 percent in 2019, due to lower activity in the primary and tertiary sectors on the supply side. In the tertiary sector, the lockdown measures have significantly affected non-factor services, including catering and tourism. On the other hand, the industrial sector was resilient amidst the pandemic and was the main growth driver in 2020. While considerable uncertainty exists in the economic outlook, the economy is projected to rebound by 3.8 percent on average per year in 2021-2023, with the fiscal deficit narrowing to 2.8 percent of GDP by 2023. The latest World Bank-IMF Debt Sustainability Analysis (DSA) of July 2021 concluded that Cameroon remains at high risk of debt distress.
- 4. The National Development Strategy (SND30) identifies the need for fiscal consolidation and structural reforms, including in the electricity sector, to promote inclusive growth and economic development.** The SND30, launched in 2020 by the Government of Cameroon (GoC), acknowledges the central role of the electricity sector to achieve the

¹ UNDP, 2019. <https://hdr.undp.org/sites/default/files/Country-Profiles/CMR.pdf>



country’s industrialization objectives. In addition, SND30 aims to improve access to basic social services, strengthen climate change adaptation and mitigate the effects of climate change, and improving the country’s governance to achieve development goals.

Sectoral (or multi-sectoral) and Institutional Context of the Program

5. **In the last twenty years, the Government of Cameroon has spearheaded a reform process to improve efficiency, performance and the fiscal impact of the electricity sector.** The sector has evolved from a classic arrangement of vertically integrated state-owned single operator SONEL (1974-2001) to introducing private sector participation in generation and distribution, and sector unbundling. In 1998, the GoC opened the generation segment to competition² which allowed the incorporation of two IPPs a decade later³. In 2001, SONEL was privatized as a vertically integrated company, with majority of shares sold to the American AES Corporation⁴ (AES-SONEL), which in 2014 transferred its shares to the British-owned private equity firm Actis and the company was renamed as Energy of Cameroon S.A., ENEO. In 2011, a new law paved the way for the sector’s unbundling which culminated with the transfer of the transmission and system operation activities to a new state-owned company, SONATREL⁵.

6. **Most electricity in Cameroon is generated from hydropower (77 percent), while thermal power generation using natural gas, heavy-fuel-oil, and liquid-fuel oil account for 23 percent of the country’s energy mix.** Electricity generation is mainly provided by ENEO with a total installed capacity of around 969 MW in 37 power plants, including 13 grid-connected and 24 thermal off-grid. The other significant generators are thermal Independent Power Producers (IPPs) - Kribi Power Development Company (KPDC), and Dibamba Power Development Power Company (DPDC), which respectively operate a 216 MW gas-fired power plant Memve'ele and an 86 MW heavy fuel oil power plant. The 211 MW Memve’ele dam hydropower plant is operated by Electricity Development Corporation on behalf of the GoC. Cameroon has a total installed electricity generation capacity of 1,482 MW and a peak demand of 1,040 MW in 2021⁶. Infrastructure of Cameroon’s power sector system currently consists of three independent (not interconnected) systems, with their distribution networks in all cases under ENEO’s concession.

Table 1: Electricity Sector at a Glance

Electricity access rate	63% (93% urban, 24% rural) (2019) ⁷
Number of electricity customers	1,483,940 (2020)
Installed capacity	1,482 MW (2020)
Generation mix	77% hydro, 23% thermal, 0.03% solar
Average retail tariff	US\$0.15 per kWh
Average transmission and distribution (T&D) losses	36% (o/w 29% distribution losses, 7% transmission losses)
Electricity bill collection rate	86.5%

Sources: ENEO Annual Reports and WB Estimates

7. **For the past two decades, the World Bank Group (WBG) has been Cameroon’s lead partner in the electricity sector, supporting reforms and providing loan and equity investments as well political risk insurance.** The WBG’s engagement spans all subsectors, including: (i) rural electrification, through the Rural Electricity Access Project for Underserved Regions (P163881); (ii) hydropower development, by financing the Lom Pangar Hydropower Dam (LPHP

² Law n° 98/022 of December 24, 1998.

³ 88 MW HFO Dibamba Power Plant (2009) and 216 MW Gas Kribi Power Plant (2013), both majority-owned by Globeleq in partnership with the Government of Cameroon.

⁴ AES Corporation held 51 percent of the capital, State of Cameroon 44 percent and Personnel 5 percent.

⁵ Created in 2015 and operational in 2019.

⁶ ENEO, Investment Plan 2022-2026.

⁷ Tracking SDG7 report.



– P114077) commissioned in June 2017 and the public-private 420 MW Nachtigal plant, which was financed by IFC in 2018 with a partial guarantee from IBRD/IDA (P157734); (iii) the transmission segment, by materially contributing to the establishment and operationalization of the state-owned national transmission company (*Société Nationale du Transport de l'Électricité du Cameroun*, SONATREL) following the unbundling reform, and providing financing for the expansion of the transmission network through the Electricity Transmission and Reform Project (ETRP – P152755, approved in 2016). The World Bank also recently approved financing for the Cameroon-Chad Interconnector Project (P168185), which will provide the first transmission backbone to the Central African Power Pool (CAPP).

8. Sector reforms have not brought the expected results to the population due to weak Government planning, insufficient financial resources for the sector and mediocre operational performance by ENEO. A core problem in the electricity sector in Cameroon is insufficient financial resources in the sector. The average end-user tariff of 81 FCFA/kWh (approx. US\$0.15/kWh) is relatively high and yet tariff revenues do not cover the full cost of service. As such, the GoC provides compensation to the privatized distribution company ENEO to cover the gap between costs recognized by sector regulator and tariff revenues from electricity sales to its customers. Debt and arrears in the sector originated from unpaid electricity bills, inadequate subsidy compensation, incomplete regulation and poor operational performance on the part of ENEO derive in sector financial distress. A significant part of the arrears is linked to the delayed payment of electricity bills by government institutions and SOEs, as well as delays in the payment of the tariff compensation by GoC, which together adversely affect ENEO's financial position. In turn, ENEO has historically had outstanding payments to IPPs, the national electricity transmission company (SONATREL), the river basin operator (Electricity Development Corporation - EDC) and fuel suppliers.

9. The GoC repaid all arrears to ENEO and key sector stakeholders totaling XAF 182 billion (approx. US\$313 million) between December 2021 and January 2022, however, challenges remain. The intervention from the GoC to mitigate the liquidity crisis in the sector was partly motivated by the African Cup of Nations hosted by Cameroon from January to February 2022. The sector was under additional pressure from Globeleq (IPP which owns KPDC and DPDC) who had shut down three of the thirteen turbines in its gas-fired thermal plant at Kribi due to historically high levels of arrears from ENEO. This forced ENEO to resort to more expensive sources of production e.g. HFO, placing additional financial pressure on the sector. The GoC raised XAF 118 billion (US\$202 million) on the local bond market to compensate ENEO for the transfer of transmission assets to SONATREL, debts related to the consumption of public administration and public lighting, and, exceptionally, advances on the tariff compensation of 2022. To prevent the re-accumulation of arrears beyond 2022 and improve the sector's financial viability, the GoC recognizes the need for structural reforms. The GoC is preparing a power sector recovery plan ('PSRP') which will highlight the structural issues in the sector and provide actionable, time bound recommendations for resolving them. This will be structured in line with the SND 30 strategy and will form the basis of the PforR support to the government.

Relationship to CAS/CPF

10. The World Bank Country Partnership Framework with Cameroon 2017 to 2021⁸ (CPF FY21-FY26)⁹ provides the overarching framework for this operation. The CPF is based on the priorities identified in the SCD and is aligned with the Government's program. The CPF focuses on three strategic pillars: (i) addressing multiple poverty traps in rural areas, ii) fostering infrastructure and private sector development and iii) improving governance. The proposed operation will support all three pillars of the CPF by improving access to and reliability of electricity thereby increasing productivity in rural areas as per the first pillar. Efforts to enhance sector financial viability through reforms will foster private sector led growth in as per second pillar. The CPF recognizes the importance of the energy sector in proving

⁸ Report No. 107896, March 28, 2017.

⁹ CPF FY21-FY26 is currently under preparation.



reliable and quality electricity supply to improve the business environment, transform the economy and promote private sector led growth. This would further support Cameroon’s goal of attaining higher middle-income status by 2035.

Rationale for Bank Engagement and Choice of Financing Instrument

11. **Given the GoC’s commitment to address the root causes of the power sector’s underperformance affecting the daily lives of Cameroonians, the PforR instrument has been identified as the most relevant to incentivize structural sector-wide reforms.** The proposed PforR, the first for the GoC, comes at a critical juncture in the country’s energy sector where key reforms are required to alleviate the fiscal burden of inadequate tariff regulation, improve sector financial viability, and strengthen institutional capacity to increase electricity access. Through Disbursement Linked Indicators (DLIS), the PforR instrument provides incentives to the implementation of critical reforms as defined by the Government in the Power Sector Recovery Plan (PSRP) under preparation. The PforR framework strengthens the focus on results, institutional accountability, and payment discipline throughout the sector value chain.

C. Program Development Objective(s) (PDO) and PDO Level Results Indicators

Program Development Objective(s)

12. The Program's Development Objectives (PDO) are to improve financial sustainability of the power sector, increase access to electricity and improve quality of service.

PDO Level Results Indicators

13. The following outcome indicators will be used to measure achievement of the PDO:
- (a) **PDO Indicator 1:** Reduction in tariff shortfall (gap between revenue requirement and tariff revenues) in power sector (US\$ million);
 - (b) **PDO Indicator 2:** People provided with new or improved electricity service (Corporate) (Number);
 - (c) **PDO Indicator 3:** Metered public lighting systems (Number);
 - (d) **PDO Indicator 4:** Reduction in System Average Interruption Duration Index (SAIDI).

D. Program Description

PforR Program Boundary

14. The PforR will provide support to a subset of activities of the Government’s sector strategy¹⁰ and the PSRP under preparation. This will provide a roadmap to improve the financial sustainability of the electricity sector, which is a necessary condition to meet the ambitious sector objectives set in SND30. Indeed, the SND30 aims to position the Republic of Cameroon as an electricity exporter in the sub-region by scaling-up hydropower generation, developing the transmission infrastructure and strengthening the national transmission company SONATREL, and upgrading and expanding distribution infrastructure through the private distribution operator ENEO under its concession contract and applicable regulatory framework. In addition, the SND30 envisions to provide access to affordable power to all the population by 2030.

¹⁰ National Development Strategy 2020-2030 (SND 30) and Rural electrification Master Plan (2016).



Figure 1: Program Boundaries of the proposed PforR

Financial Sustainability	Access to Electricity and Quality of Service	Energy Infrastructure	Institutional capacity and accountability
<ul style="list-style-type: none"> • Revenues of regulated companies <ul style="list-style-type: none"> - AAR methodology updated and applied for SONATREL and EDC - Improved tariff structure for electricity sales to final consumers - Subsidies to low-income customers - Cost-recovery tariffs after transition - Wheeling charge based on AAR for SONATREL and TSA • Payment of public sector's electricity bills <ul style="list-style-type: none"> - Pre-paid meters installed to non-critical customers - GoC payment mechanism for critical customers 	<ul style="list-style-type: none"> • Least-cost electrification planning <ul style="list-style-type: none"> - National Electrification Strategy • On-grid electrification <ul style="list-style-type: none"> - Last mile connections - LV/MV network expansion - MV/HV network expansion • Least-cost power system expansion planning <ul style="list-style-type: none"> - Systematization of update of Master Plan • Quality of Service <ul style="list-style-type: none"> - Distribution transformers 	<ul style="list-style-type: none"> • Generation Capacity <ul style="list-style-type: none"> - Increase capacity to 5 GW (hydro, solar PV, gas and biomass) - Private sector engagement • Transmission <ul style="list-style-type: none"> - Additional HV substations and lines 	<ul style="list-style-type: none"> • SONATREL capacity <ul style="list-style-type: none"> - Capacity building TA - TSO role strengthened • Accountability key sector stakeholders <ul style="list-style-type: none"> - Reports on regulatory audits on ENEO and SONATREL's KPI progress are published annually

E. Initial Environmental and Social Screening

15. The E&S risks and impacts of the proposed operation are assessed to be Substantial. Some of the activities under program area 3 to increase access to electricity and improve quality of services are also proposed / recommended to be included in the IPF component considering their potential E&S risks. This will ensure that the GoC follows the Bank's Environmental and Social Framework, and the Bank provides support in ensuring effective management and monitoring of E&S risks and impacts. Upon removal of the above-mentioned activities with potential risks and impacts, the rest of the PforR could be assigned a Moderate E&S risks level consistent with Bank Policy of Program-for-Results Financing.

16. The World Bank has policy and directives which require that due diligence be undertaken to ensure that the activities under the PforR meet a set of six (6) core environmental and social principals. This shall be done through an Environmental and Social Systems Assessment (ESSA). The ESSA will also recommend an action plan that identifies actions aimed at enhancing PforR Program Systems and Performance and agreed with the GoC for implementation. Additional measures to address information disclosure and grievance redressal will be considered during project preparation and implementation. The draft systems assessment will be prepared following consultation of relevant stakeholders and disclosed in-country and through the Bank's website and will be finalized before appraisal. The Bank



team shall undertake the ESSA in order to guarantee that Screening the Program E&S Risk, assessing of GoC systems and identification of recommended actions and management measures is completed satisfactorily.

17. The implementing agencies of the Program are Electricity Development Corporation (EDC), SONATREL, ENEO, and ARSEL. The proposed ESSA will assess the E&S capacity of these agencies and further identify areas towards strengthening them. Based on the above preliminary analysis, the program's environmental risk is Substantial and social risk is Moderate.

18. The proposed Program will have positive environmental and social impacts by improving public lighting through installation of state-of-the-art meters. The potential environmental risks and impacts of the Program would be associated with construction of substation and MV/LV distribution network expansion in the national grid, as well as replacement of old meters to pre-paid electronic meters. These risks could include pollution of soil and water resources from earthworks, dust and noise pollution from construction traffic and equipment, generation of waste, occupational health and safety risks from routine construction works and electrical installations. Installation of meters will result in the generation of electrical and electronic wastes (e-waste). Inappropriate processing of e-waste can cause detrimental environmental and public health effects due to the presence of hazardous materials. The program is designed to exclude any major construction works such as power plants and transmission lines. In addition, the proposed Program will set out clear exclusion criteria to avoid supporting activities which are assessed to have likely significant adverse impacts. The potential impacts are mostly site specific and reversible, and high adverse impacts are not expected. An Environmental and Social Systems Assessment (ESSA) of the Program will be carried out during the project preparation in compliance with the World Bank PforR policy. The ESSA will further assess the potential environmental impacts and analyze Program systems to propose additional mitigation measures.

19. The Program does not intend to do any land acquisition and/or resettlement as it does not support any new major construction. However, the above works may cause, in limited cases, minimal impact on the land, including impacts on structures and crops, for the construction of distribution lines and poles. Also, in a few cases, there may be situation where taking small quantities of land is needed for construction of distribution transformers and substations. The detailed assessment will further explore the possibilities of any land requirements and/or resettlement issues (if any) and incorporate appropriate measures for addressing them.

20. The Cameroon's Environmental Framework Law No 96/012 of August 5, 1996 has provisions in the numerous decrees and ordinances that would mirror or meet the core principles incorporated into the Bank Policy Program for Results Financing: (CP1) general principles of environmental and social impact assessment and management; (CP2) mitigation of adverse impacts on natural habitats and physical cultural resources; (CP3) protection of public health worker safety; (CP4) Land Acquisition; (CP5) Social Considerations; Indigenous Peoples and Vulnerable Groups and (CP6) Social Conflict. Whilst the provisions of the law exist, their implementation is often weak and follow up marred by governance issues. A previous review of the presents the institutional capacity for environmental and social impact management within the Program system and identification of gaps with respect to the core principles as per the table below.

21. The teams shall undertake a stakeholder engagement which is an essential element of the ESSA process as the Bank is committed to ensuring that both internal and external stakeholders are given an opportunity to meaningfully participate in the ESSA process, inform the preparation of the ESSA Report, and provide meaningful inputs throughout the lifecycle of the operation. Following Decree 2013/0171/PM of 14/2/2013 which requires that a full-scale impact assessment be prepared in conjunction with participation of stakeholders that may be affected by the proposed project, this section will ensure responsiveness and accountability through stakeholder consultation, timely



dissemination of the PforR Program information, and responsive grievance redress mechanisms. the stakeholder consultation shall ensure that an effective grievance redress mechanism (GRM) is in place and will ensure that complaints appropriately received, recorded, resolved, and follow up by the committee in charge.

22. The ESSA shall be conducted for a period of one month and shall be updated as more information on the activities included in the different result areas become clearer. The technical assistance activities to ARSEL shall be fully determine and subject to the activities included in this technical assistance, more work shall be completed. Increasing access to electricity also entail many physical operations which may require detail analyses down the line. The anticipated period for completion of the ESSA is during the first half of March 2022. The report shall be divided into 5 sections; (i) program description, (ii) description of expected program environmental and social effects including benefits, adverse impacts and risks, (iii) assessment of GoC’s environmental and social management system relevant to the program, (iv) recommendations and actions inputs into the PAP and implementation support plan; and (v) supporting annexes and reference documents.

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

Summary of Screening of Environmental and Social Risks and Impacts of the IPF Component
