Program Information Document (PID)

Concept Stage | Date Prepared/Updated: 20-Dec-2019| Report No: PIDC27277

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Africa	P171225	West Africa Regional Energy Trade Development Policy Financing Program (P171225)	
Region	**Estimated Board Date**	**Practice Area (Lead)**	**Financing Instrument**
AFRICA	Jul 01, 2020	Energy & Extractives	Development Policy Financing
Borrower(s)	**Implementing Agency**		
Governments of Cote d'Ivoire, Guinea, Mali, Burkina Faso, Sierra Leone, Liberia	Governments of Cote d'Ivoire, Guinea, Mali, Burkina Faso, Sierra Leone, Liberia		

Proposed Development Objective(s)

Increase regional electricity trade to increase energy security, lower electricity cost and therefore support economic growth and shared prosperity in the region.

Financing (in US$, Millions)

SUMMARY

Total Financing	300.00

DETAILS

Total World Bank Group Financing	300.00
World Bank Lending	300.00

Decision

The review did authorize the preparation to continue

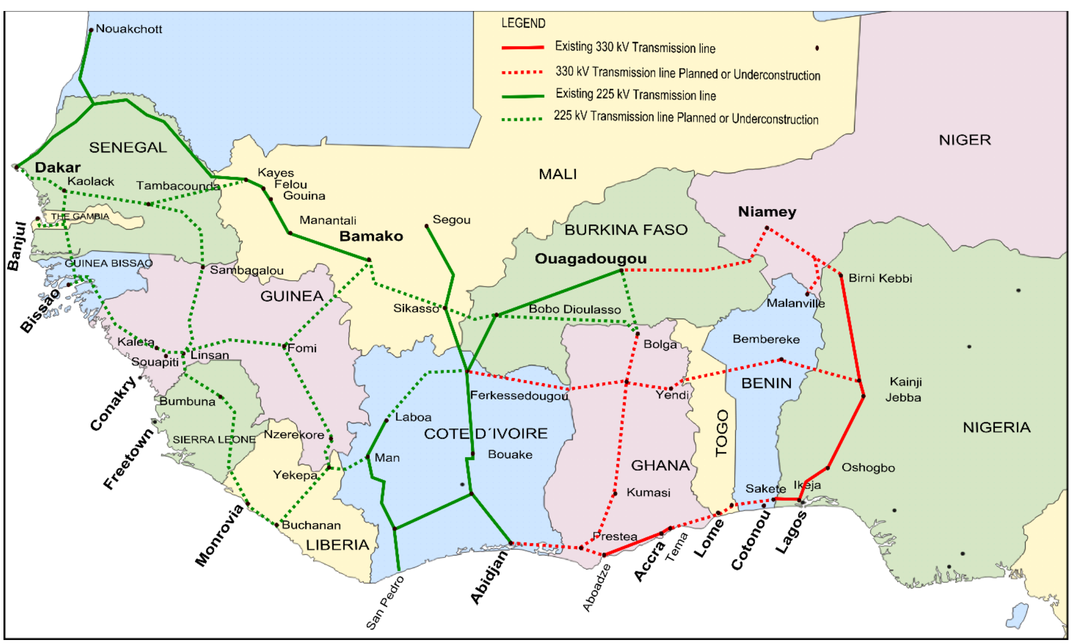
B. Introduction and Context

1. **The proposed Development Policy Financing Program aims at promoting significant reduction in cost of electricity in the region, thereby alleviating severe fiscal pressures for countries in the ECOWAS region.** The region has an abundance of cheap and clean energy sources. In particular, hydropower in Guinea, Mali and Cote d'Ivoire, and gas reserves in Nigeria, Ghana, Cote d'Ivoire and recently Senegal. These sources are concentrated in a

few countries, leaving many other countries reliant on expensive oil-fired generation sources requiring import of fuel linked to international oil prices. As a result, West Africa has high electricity costs, needing to be met through a combination of high tariffs and high subsidies. The result is the double effect of expensive electricity for consumers and high fiscal burdens on governments. The cost of electricity is unaffordable to many countries, leading to SOE debts and unmanaged contingent liabilities. At the same time, electricity access rates are low, and there is need to invest significant amounts in the sector to connect more households.

2. **An important solution is to increase cross-border electricity trade so that regional endowments can be better used across the region.** Analytical work by the Bank shows that the benefits of interconnection and trade are expected to be of the order of US$ 5 – 8 billion per year. In addition, a fully integrated regional power market has the potential to reduce cost of service by half in countries currently dependent on oil-fired power generation and enable countries to better integrate intermittent sources of electricity generated from solar and wind. Our vision is to build sufficient trust in trade so that investment decisions around projects fully take account of the potential for import and export, thus enabling the development of a lower cost power system.

3. **The region has been working on several initiatives to advance cross-border electricity trade.** Several transmission projects, being financed by the Bank and others, are currently underway. Physical interconnection between all 14 countries in the region is expected to be completed in the early 2020s. For the first time in history, countries in the region, namely Ghana and Cote d'Ivoire, have an excess capacity of electricity, as much as 2 GW by 2020. Progress has also been made on the regional legal and institutional frameworks. Regional bodies to coordinate system operation and economic regulation having been established and the legal framework for regional power trade has been laid down through a body of regional regulations. Some technical issues remain to be addressed around regional standardization and the need for further coordination needs to be addressed.



Export countries: Cote d'Ivoire, Ghana, Guinea (with future hydro), Senegal (with future gas)

4. **The major issue currently holding back regional trade along existing transmission interconnections is cases of non-payment for power by importers and non-delivery of power by exporters, and the perceptions these cases create about the credibility of counterparts in this market.** These are acting to undermine confidence in the

regional power market. So even if there is transmission capacity between Cote d'Ivoire and Mali, and there is excess generation in Cote d'Ivoire, the fact that Mali owes Cote d'Ivoire past payments affects the extent to which Cote d'Ivoire prioritizes exports to Mali. A task force, set up by the WAPP and working with the Bank, identified underlying causes of payment arrears, including:

- deficiencies in the bilateral electricity import/export contracts;
- lack of formal mechanisms for prioritizing payment of import contracts in situations of weak cash flow;
- unwillingness to apply standard commercial disciplines for non-payment;
- due to the presumption of implicit sovereign guarantees for power trade, ministers of finance are called to pay international arrears; and
- utilities engaging in power trade not being financially viable.

Relationship to CPF

5. The goals of the proposed regional DPF are aligned with various World Bank strategies at a global, regional and national level. They are aligned with the World Bank goals of ending extreme poverty and promoting shared prosperity through providing the participating countries with affordable, reliable and sustainable electricity through regional integration and trade. This in turn enhances the prospects for further integration of countries' infrastructure and natural resources management, therefore resulting in a more sustainable growth. The program is aligned with the Bank's Regional Strategy for Africa and relevant Country Partnership Frameworks. The Africa Regional Strategy renews IDA's commitment to supporting regional integration as a foundation of the development process, and identifies cross-border power trade as a priority area of engagement. The Regional Strategy refers to lowering energy, transport, trading and transaction costs remaining a priority to boost productivity. It also refers to the benefits of regional integration. Specifically, the proposed DPF supports the first pillar of the World Bank's Africa Strategy on promoting competitiveness: by reducing generation costs, it will support financial recovery of the countries' utilities, as well as supporting the phasing out of state subsidies for the power sector. The Africa Regional Energy Strategy likewise identifies regional integration as a foundation for the achievement of regional energy objectives. In addition to the development of cross-border infrastructure for generation and transmission, the strategy emphasizes engagement on three further dimensions of regional integrations that are central to this operation: reducing off-taker risk; building trust in trade; and strengthening institutional capacity and multi-stakeholder processes.

6. The proposed project is fully aligned with dialogue held with Ministers of Energy and/or Finance for each of the countries. Several Ministers of Finance have expressed strong desire for the Bank to offer this program in the context of the need to find a solution to the heavy fiscal burden of the sector.

7. For Cote d'Ivoire, the proposed project is aligned with the most recent Country Partnership Framework (CPF, 2016-2019) updated with the Performance and Learning Review (PLR, 2018-2021). This strategy aims at strengthening economic infrastructure to accelerate private-sector led economic growth. It would help strengthen the infrastructure and enable the crowding of private investors for development of future regional infrastructures.

8. For Burkina Faso, the proposed operation corresponds to the objectives posed by World Bank's Country Partnership Framework (CPF) for FY2018-23. The operation supports the CPF's two objectives of the focus area 1, namely (i) improving energy access, and (ii) addressing management of extractives and sustainability of natural

resources. It contributes to the Government's priorities of shifting the energy mix towards least-cost sources such as imports and solar power. The operation is also complementary with the First Phase of the Inter-Zonal Transmission Hub Project of the WAPP (North Core Regional Transmission Project), which - by facilitating trade between Niger, Nigeria, Benin and Burkina Faso - will improve access to affordable electricity imports.

9. For Mali, the proposed program is in line with the ongoing Country Partnership Framework (CPF) for FY2016-19. The Systematic Country Diagnostic for Mali identifies connectivity as a critical constraint to lifting most Malians out of poverty and building the foundations for economic transformation, while energy is critical to enabling transformation of the economy. In this context, the proposed operation will support the CPF's objective of diversifying Mali's energy mix, thus lowering the country's dependency on imported fuel and addressing systems bottlenecks, with direct impacts on reducing Energie du Mali (EdM) subsidies, which in turn will free fiscal space for pro-poor programs.

10. Other Bank operations: interventions to date by the Bank and other donors at a regional level have focused on building physical infrastructure and providing technical support to advance synchronization of grids.

C. Proposed Development Objective(s)

11. The PDO is to increase regional electricity trade to increase energy security, lower electricity cost and therefore support economic growth and shared prosperity in the region.

Key Results

12. Key expected results include an increase in the number of contracts that specifically enforce payment and supply; a reduction in trade arrears; reduction in weighted average cost of power; increase in share of renewable energy and an improvement in the financial condition of utilities.

D. Concept Description

13. **Following joint analytical work by the Bank and the West Africa Power Pool, an ECOWAS Directive on Securitization of Cross-Border Electricity Trade adopted in December 2018 lays down a regional policy compact for addressing these concerns.** The Directive lays down clearly the responsibilities of a range of institutional actors implicated in the regional power market. It addresses trade specific measures around contracts and payments, as well as more fundamental sector issues required for developing longer-term confidence in trade. Such measures should also give confidence to private sector investors, through measures to ensure financial viability, and measures to advance competition through third-party access at appropriate cost. The Directive was approved by the ECOWAS Council if Ministers in December 2018. A number of ECOWAS countries have requested Bank assistance to ensure that its measures are indeed adopted at a national level by countries in the region.

14. **The proposed operation in the amount of US$ 300 million is the first in a programmatic series of two single-tranche DPFs.** Use of a DPF instrument is due to the focus on the government's programs needing to adopt the reforms and policy actions to ensure implementation of the Directive. The first countries to form the DPF Program are all either currently interconnected or due to be shortly: Cote d'Ivoire, Mali, Burkina Faso, Benin and Togo as importers. Additional countries could join in future phases, particularly those countries that will be newly connected to the West Africa Power Pool during the time window 2020-22 (Senegal, Guinea-Bissau). A regional rather than national approach is proposed as regional public goods with positive spill-overs between countries are

being addressed. The momentum around a regional program may also enable countries to take tougher decisions, if they know this is part of a program where their counterparts are also taking tough decisions.

15. **Countries in the region have also expressed the need for specific financial instruments to indemnify them when counterparties fail to meet their contractual obligations.** Exporters (Cote d'Ivoire in particular) have led the expressions of this need although importers may also have the need for such instruments since they incur high costs of replacement power or suffer the effects of non-supply when exporters fail to deliver in accordance with their contractual obligations. As a result, the Bank is considering support to the region in creating a fund to enable trade. It is also intended that pre-requisites for joining the fund and penalties for not meeting contracted obligations would significantly enhance the sustainability of measures undertaken under the DPF. The fund would therefore build a very effective and practical intervention onto the DPF program, helping to consolidate/sustain its impact.

E. Poverty and Social Impacts and Environmental Aspects

Poverty and Social Impacts

16. **The DPF program supports Governments in increasing regional electricity trade through securitization of trade in the regional market (pillar A), promotion of competition in the regional market (pillar B), and improving regional oversight of creditworthiness of off-takers for the regional market (pillar C).** For each of the countries included under this program, a large share of the population lives in poverty, and increased regional electricity trade is expected to accelerate poverty reduction. Reforms under this DPF are likely to impact household welfare through multiple channels: (i) better integration of regional electricity markets increases supply through better functioning markets, and contributes to lower prices of electricity, (ii) higher supply and reliability of electricity support better health and education outcomes, and potentially have a positive impact on gender equality, (iii) higher competition creates opportunities for investments which expands access, and enhances affordability especially among poor households, and (iv) better access to reliable electricity enables private sector growth and job creation through an improved business environment. In the short term these positive impacts are restricted to households with access to electricity, but proposed reforms under this DPF lay the foundations for better access to excess supply (in some countries) for increased access, while creating incentives for investments into additional generation capacity, better transmission and distribution of electricity.

17. **Reforms under Pillar A and B establish an institutional and regulatory framework for more electricity trade and higher levels of market competition in electricity markets.** As of today, all countries included in this DPF show limited electricity access. Electricity rates are typically lower in rural areas than in urban areas (9.6 versus 60.1 percent, Burkina Faso). Access to (and usage of) electricity is also lower among poor households than rich (6.8 versus 29.9 percent, Burkina Faso). Prior actions supported under Pillar A and B are expected to strengthen the governance structure of electricity markets, and thereby improve the functioning of markets with better access to excess generation in some countries. These reforms are likely to boost access to electricity, and support poverty reduction through higher purchasing power of households arising from lower prices for electricity.

18. Reforms under Pillar C promote regional oversight of financial and fiscal sustainability of the energy sector by requiring Governments to prepare energy sector recovery plans, which include provisions to ensure adequate utility revenues through timely combination of appropriate tariff adjustment and subsidy transfers. A recent overview of electricity markets in Sub-Saharan Africa shows that most countries use subsidies and have consumer prices below cost-recovery level; nevertheless, subsidies are not always transferred in a timely manner, undermining the financial situation of the utility. Even if tariff adjustments are not explicitly required as prior actions under this DPF, it is likely that they are required to reach cost-recovery in the short-run if the government has insufficient fiscal space for subsidy transfers. Tariff adjustments would decrease the purchasing power of households through direct and indirect impact (increases in prices of other goods and services using electricity as input). International evidence has shown that with the rich consuming more electricity than the poor, most subsidy schemes are regressive; in consequence, the overall effect of the program of lowering costs and reducing subsidies will help to re-balance the situation. Depending on consumption patterns among poor and vulnerable households, it might be necessary to consider social protection interventions or adjustment of tariff structure.

Environmental Impacts

19. The operation is expected to lead to displacement of heavy fuel oil and diesel generation with lower carbon solutions such as gas, as well as renewable energy. The operation is therefore expected to have positive environmental impacts. These issues will be reviewed in detail during preparation phase.

CONTACT POINT

World Bank

Mustafa Zakir Hussain, Thomas Blatt Laursen
Lead Energy Specialist

Borrower/Client/Recipient

Governments of Cote d'Ivoire, Guinea, Mali, Burkina Faso, Sierra Leone, Liberia

Implementing Agencies

Governments of Cote d'Ivoire, Guinea, Mali, Burkina Faso, Sierra Leone, Liberia
Abdourahmane Cisse
Minister of Energy
abdourahmane.cisse@presidence.ci

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

APPROVAL

Task Team Leader(s):	Mustafa Zakir Hussain, Thomas Blatt Laursen

Approved By

Country Director:	Deborah L. Wetzel	02-Jan-2020