Public Disclosure Authorized

Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 13-Oct-2023 | Report No: PIDC36614

BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Operation ID	Operation Name	
	P181328	Accelerating Sustainable and Clean Energy Access Transformation - Regional Energy Access Financing Platform	
Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)	
24-Oct-2023	30-Nov-2023	Energy & Extractives	
Financing Instrument	Borrower(s)	Implementing Agency	
Investment Project Financing (IPF)	Trade and Development Bank	Trade and Development Bank	

Proposed Development Objective(s)

The Project Development Objective is to accelerate access to and financing of sustainable and clean energy in Eastern and Southern Africa.

PROJECT FINANCING DATA (US$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)?	Yes
Is this project Private Capital Enabling (PCE)?	Yes

SUMMARY

Total Operation Cost	**590.00**
Total Financing	**590.00**
of which IBRD/IDA	**275.00**
Financing Gap	**0.00**

DETAILS

World Bank Group Financing

International Development Association (IDA)	275.00

IDA Credit	275.00
Non-World Bank Group Financing	
Trust Funds	15.00
Energy Sector Management Assistance Program	15.00
Commercial Financing	300.00
Unguaranteed Commercial Financing	300.00

Environmental and Social Risk Classification	Concept Review Decision
Substantial	The review did authorize the preparation to continue

B. Introduction and Context

Country Context

1. Eastern and Southern Africa (AFE) region is home to 656 million people. Its steady progress of past decades in ending extreme poverty and boosting shared prosperity on a livable planet has been upended by a series of global shocks. The recovery from COVID-19 pandemic has been disrupted with the food shortages, soaring energy prices and macroeconomic turbulence following the Russian invasion of Ukraine. Impacts have been exacerbated by adverse climate events hammering the region, including the worst drought in the last four decades and the longest-lasting tropical cyclone ever recorded in the Southern Hemisphere.

2. AFE region's economic recovery, resilience and faster progress towards poverty reduction is held back by the lack of energy access. Only 48 percent of the AFE population has access to electricity, a figure that drops precipitously in rural areas (26 percent)[1]. More than one third of all food production is lost to spoilage on the way to market, in large part due to lack of refrigeration. Fewer than half of all hospitals in the AFE region have reliable electricity access and nearly a third of all health care facilities have no electricity access of any kind. It is rare for schools in rural areas to have electricity service. Moreover, more than three-thirds of all people in the AFE region lack access to clean cooking technologies and fuels. Per ESMAP estimates, the resulting health, gender and climate impacts of lack of clean cooking cost the AFE region annually US$169 billion.[2] The ambitious regional integration agenda is undermined by lack of electricity access, which limits the volume of electricity trade across countries, as well as broader integration opportunities. AFE region's energy access progress is uneven across countries, between urban and rural areas and across income quintiles, as well as between electricity and clean cooking access (Figure 1). Half of population without electricity access resides in countries in fragile, conflict and violence situations (FCV).

Sectoral and Institutional Context

[1] World Bank: trackingsdg7.esmap.org (2023 update, data as of 2021)
[2] ESMAP: Clean Cooking Planning Tool (2022): energydata.info/cleancooking/planningtool

3. Technology developments resulting in falling costs of solar energy and battery storage, increased energy efficiency and smart digital applications have made modular, distributed renewable energy (DRE) an increasingly attractive complement to centralized grid systems, giving rise to innovative, private sector-driven business models. This has revolutionized energy access in SSA, a vast continent with sparsely populated areas with low-income populations, for many of whom traditional grid expansion would not be economically viable. With cost-competitive, consumer-centered models and consumer financing options, the (mostly) start up DRE companies have brought much needed innovation to the energy access space, otherwise dominated by state-owned utilities. DREs are serving already 100 million people in Sub-Saharan Africa, most of them in the AFE region.[3]

4. DRE electrification progress is now also opening opportunities to start addressing clean cooking access. Results-Based Financing (RBF) and other forms of impact-driven finance, including carbon finance are gaining ground as a way to pay for the expected public-goods benefits from clean cooking interventions. There have been growing synergies with electricity sector, in particular on eCooking. New-generation, high-efficiency eCooking appliances and induction cookers are especially promising — by reducing the amount of electricity required for cooking, they can dramatically lower its costs. Many mini grid developers are exploring eCooking as a way to increase demand (and revenues) from mini grid customers. In addition, the top OGS companies have integrated clean cooking in the offering to their customers.

5. Private sector financing needs to increase. Most of the equity and debt funding mobilized up to now have been backed by DFIs. The sector has only a few large ("scale-up") companies, which are driving most of the investments. It is estimated that DRE sector needs to raise about $40 billion in equity and debt. This will require mobilizing new sources of finance and moving the DRE sector towards greater commercial viability. Progress and finance mobilization need to move from linear to exponential. This will require a continued growth of the existing "scale-up" companies, as well as scaling the 'next generation' of companies, and in parallel crowding in new (large) market players. This, in turn, will require developing a more robust ecosystem that can incentivize scale, speed and cost reduction. The proposed ASCENT Regional Energy Access Financing Platform (REAF) is the first step in this direction.

Relationship to CPF

6. The WBG's Africa Regional Integration and Cooperation Assistance Strategy (Update for the period FY21-FY23; Report #154458) also emphasizes that achieving universal energy access is a priority for the region, highlighting the importance of harmonizing policy and regulations to create a regional market for distributed renewable energy; of increasing levels of cross-border power trade and of lowering the cost of energy services while improving affordability.

C. Proposed Development Objective(s)

7. The Project Development Objective is to accelerate access to and financing of sustainable and clean energy in Eastern and Southern Africa.

Key Results (From PCN)

[3] World Bank, IFC, GOGLA and CLASP: Off-grid Solar Market Trends Report: State of the Sector and Outlook, 2022; ESMAP: Mini grids for Half a Billion People, Market Outlook and Handbook for Decision Makers, 2022

8. The Project will deliver electricity and clean cooking access for households, businesses, farmers and institutions in Eastern and Southern Africa

D. Concept Description

9. The Project is an integral part of the Phase I of the proposed Accelerating Sustainable and Clean Energy Access Transformation (ASCENT) in Eastern and Southern Africa Multiphase Programmatic Approach (MPA) (P180547). ASCENT aims at increasing access to sustainable and clean energy in the AFE region, targeting 100 million people. The proposed ASCENT Regional Energy Access Financing Platform (ASCENT-REAF, P181328) will contribute to the ASCENT MPA by establishing a financing platform that will provide loans and grants to distributed renewable energy and clean cooking companies operating in the AFE region to finance their expansion.

10. Component 1: Lending to DRE and clean cooking companies**:** This component will provide loans to DRE and clean cooking companies to expand electricity and clean cooking access in IDA-eligible countries in the AFE region that are TDB members.[4] The Component will finance sub-projects aimed at sales, distribution and financing of off-grid solar systems for households and productive uses, renewable energy mini grids, and clean cooking technologies and fuels. Eligible beneficiaries will be private/commercial enterprises legally operating in project eligible countries, with track records in delivering energy services with eligible DRE and clean cooking technologies. The project will support DRE and clean cooking companies either through direct lending or through on-lending via eligible participating financial intermediaries (PFIs).

11. Component 2: Results based financing for the frontier markets*:* This component will establish a regional RBF facility, which will finance grant funding via result-based financing and performance-based catalytic grants to support DRE and clean cooking expansion in markets unserved or underserved by national programs. RBF will support solar home systems, mini grid connections, productive use systems and appliances and clean cooking stoves and fuels (Same as Component 1). Eligible companies will need to demonstrate prior experience in the DRE and clean cooking sectors. The RBF grants will be geographically targeted. They will partially offset the initial costs and risks associated with companies expanding their operations and setting up their sales and service infrastructure in new regions and bridging the affordability gap, thereby incentivizing the private sector to serve more underserved areas, whilst keeping end user prices affordable.

12. Component 3: Technical assistance, tools and innovations for DRE and clean cooking: This component will finance technical assistance, capacity building, acquisition of tools and development and piloting (via lending or grants) of financial innovations.

[4] This currently includes Burundi, Comoros, Democratic Republic of Congo, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Somalia, South Sudan, Tanzania, Uganda, and Zambia, which are all TDB member countries. Sao Tome and Principe is also included in ASCENT, but it is not a TDB member. Eswatini and Botswana are TDB members, but they are IBRD only countries, and therefore not eligible for IDA financing.

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

Summary of Screening of Environmental and Social Risks and Impacts

13. The Distributed Renewable Energy (DRE) projects supported through the proposed ASCENT project bring about significant environmental, social, and safety (EHS) risks and considerations. While the project is designed to deliver substantial environmental benefits, such as optimizing energy systems, using lower-emission energy sources, and contributing to climate change adaptation through diversified energy supply, it also entails various E&S risks. This project, expanding on TDB's existing, WB-financed RIFF project (P171967) and its component 2 and enabling long-term lending to DRE initiatives, encompasses a multifaceted reach, targeting clean energy expansion across households, enterprises, farms, schools, health clinics, and other public institutions. While the project's focus is on solar photovoltaic (PV) systems, it contemplates the inclusion of other technologies, like small-scale hydro (up to 20MW), while avoiding investments in dams or high-voltage transmission infrastructure, and any other ventures fraught with high-risk implications, although the vast majority of subprojects are expected to be solar PV under 2 MW. A number of potential EHS risks might occur, including due to inappropriate e-waste, labor, and water resource management. Subprojects within the scope of this Project will generate battery waste, characterized by Li-ion and lead-acid batteries, alongside electronic waste comprising panels, circuit boards, and wires. The off-grid solar products and mini-grids will involve elements of hazardous material, demanding meticulous handling and management to avoid soil and groundwater contamination. The absence of comprehensive national regulations across various African countries increases these risks. The small-scale hydro projects involve additional risks such as impacts on watersheds, cumulative impacts, changes to drainage patterns and hydrology at intake sites, resource efficiency concerns, pollution challenges, and management of hazardous waste, notably used batteries. Nuisances in the form of air and noise emissions, as well as disruptions to land, water, and biodiversity, further compound the environmental challenges that the subprojects might face. The project's social risk rating is categorized as substantial. The focus is expected to be on DREs such as solar home systems, and mini grids. The civil construction work is expected mostly in the mini grid projects but is likely to be at smaller scale. The impacts of land acquisition depend on subproject size and nature, with impacts varying from low to medium. Social risks extend beyond land concerns, to sexual explotation and abuse sexual harassment (SEA/SH) risks, labor management issues, and potential engagement in areas with Indigenous Peoples (IP), Sub-Saharan African Historically Underserved Traditional Local Communities (SSAHUTLC) populations and conflict or violence-affected regions, and areas accommodating refugees. Other social risks could entail the potential exclusion of disadvantaged communities, including women, indigenous populations, and rural residents, from reaping the advantages of the project. The capacity of TDB and the PFIs to effectively monitor and supervise subprojects across a vast geographical expanse is crucial, and equally crucial, is the ability of potential borrowers to meet their E&S obligations. Operating as an apex FI, TDB will serve as the conduit for project funds to the PFIs operating at both the country and regional levels, facilitating the onward lending to DRE subprojects. Collaboration with regional and country-level FIs is key Project execution strategy. The main risks concerning the involvement of these FIs in the Project pertain to their commitment and comprehension of E&S risks and impacts

linked to DRE projects. It also relates to their E&S capacity to identify and effectively manage these risks and impacts. The FIs will need to screen projects to identify these risks such that high risk subprojects would not be eligible for financing. The Environmental and Social Management System (ESMS) of TDB and PFIs will include screening criteria and project specific exclusions to address these risks. TDB will assess the adequacy of each PFI's ESMS prior to financing them under ASCENT, and subprojects initially eligible for on-lending via PFIs will be limited to under 2MW.

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APPROVAL

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