Public Disclosure Authorized

Public Disclosure Authorized

Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 24-Apr-2025 | Report No: PIDDC01269

BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Operation ID	Operation Name	
Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Democratic Republic of, Congo, Republic of, Cote d'Ivoire, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, The, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe	P510382	M300 Patient Capital Facility	
Region	Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)
Other	22-Apr-2025	30-May-2025	Energy & Extractives
Financing Instrument	Borrower(s)	Implementing Agency	
Investment Project Financing (IPF)	Africa50	Africa50	

Proposed Development Objective(s)

The Project Development Objective (PDO) is to increase access to sustainable and clean energy in Sub-Saharan 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	**25.00**
Total Financing	**25.00**
of which IBRD/IDA	**25.00**
Financing Gap	**0.00**

DETAILS

World Bank Group Financing

International Development Association (IDA)	25.00
IDA Credit	25.00

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

B. Introduction and Context

Regional Context

1. **Sub-Saharan Africa's steady progress in reducing poverty and boosting shared prosperity in the past few decades has been upended by a series of recent global shocks.** Home to about 1.2 billion people, the region was on its way toward recovery from the turbulence of the COVID-19 pandemic, until unfavorable global and regional macro-economic developments led to devaluation of currencies, soaring inflation, rising energy prices and food shortages; adding to already worsening food security and devastating climate shocks. Consequently, GDP growth is projected to recover from 1.7 percent in 2023 to barely 2.2 percent in 2024 in the Eastern and Southern Africa (AFE) subregion, and from 3.3 percent in 2023 to 3.9 percent in 2024 in the Western and Central Africa (AFW) subregion; with poverty reduction expected to remain sluggish.[1]

2. **Energy access has been a key driver in holding back Sub-Saharan Africa's economic recovery, energy resilience and poverty reduction.** According to the latest data, 571 million or 48 percent of the Sub-Saharan African population

[1] World Bank: Africa's Pulse, No. 30, October 2024

lacks access to electricity, creating significant barriers to health care, business growth, education, productivity, digital inclusivity, and ultimately job creation[2]. It is estimated that 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[3]. Fewer than half of critical public institutions, including schools and health facilities, have access to electricity[4,5]. Moreover, about 923 million people lack access to clean cooking technologies and fuels.[6] Traditional cooking fuels expose them to severe health risks, which disproportionately affect women and children and contribute to land and forest degradation and climate change.

3. **Sub-Saharan Africa has made tremendous progress in closing the gender gap in the last decade; however, the energy sector is lagging behind, especially in terms of access to clean and modern energy.** Women in the energy sector play a significant role as users, entrepreneurs, employers, employees and as decision makers, however they face discrimination and other barriers which limit potential contributions to the energy sector. At the household level, women are most likely to be assigned the role of searching for cooking fuels and water, resulting in working long hours to complete household chores and caregiver roles. This inhibits Sub-Saharan African women from pursuing economic empowerment activities. Further, women are underrepresented in the energy sector as entrepreneurs, as energy service providers, as well as in employment especially those with science, technology, engineering, and mathematics (STEM) backgrounds.

4. **Climate change is already impacting Sub-Saharan Africa, and climate hazards are expected to further contract the electrification rate of the region.** A changing climate already has measurable impacts in many countries with increased risks of floods, extreme heat, droughts or cyclones. According to the Sixth Assessment Report by the IPCC, drought frequency has doubled since 2005, from once every 6 to once every 3 years and has become more severe during the long and summer rainfall seasons than during the short rainfall season[7]. As cyclones are expected to decrease in numbers, their intensity is expected to grow, bringing further damage to key infrastructures. Such phenomena impact all the power sector's value chain from generation to consumption, further complicating electrification and energy access.

Sectoral and Institutional Context

5. **The pace of electrification in Sub-Saharan Africa needs to triple to achieve universal electricity access by 2030.** Despite efforts to accelerate electrification across the continent, the current pace is not nearly sufficient to close the electricity access gap by 2030. With population growth outpacing energy access gains, the number of people living without electricity increased by 5 million from 566.1 million in 2010 to 571.1 million in 20228. Based on the current pace, over half a billion people in Sub-Saharan Africa will still be without electricity in 2030. Moreover, the continent's energy access progress is uneven across countries, between urban and rural areas and across income quintiles. Half of the population without electricity access resides in countries in fragile, conflict and violence situations (FCV). Female-headed

[2] World Bank: trackingsdg7.esmap.org (2024 update; data as of 2022)
[3] Global Center on Adaptation, State and Trends in Adaptation Report, 2021
[4] Moner-Girona, M., Kakoulaki, G., Falchetta, G., Weiss, D.J. and Taylor, N., 2021. Achieving universal electrification of rural healthcare facilities in sub-Saharan Africa with decentralized renewable energy technologies. Joule, 5(10), pp.2687-2714.
[5] UNESCO. 2023. Global Education Monitoring Report 2023: Technology in education – A tool on whose terms? Paris, UNESCO.
[6] WHO: trackingsdg7.esmap.org (2024 update, data as of 2022)
[7] IPCC, 2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:10.1017/9781009325844.
[8] IEA, IRENA, UNSD, World Bank, WHO. 2024. Tracking SDG 7: The Energy Progress Report.

households also tend to have lower access to electricity, as well as lower electricity consumption.9 There is a growing disparity between electricity access and clean cooking access: while the regions' population without electricity has increased slightly, the number of people without clean cooking access continues to grow at a much faster rate of around 20 million people per year. As of 2022, 923 million Sub-Saharan Africans had no access to clean cooking solutions.10 If no action is taken and current trends continue, this deficit in Sub-Saharan Africa is projected to exceed 1 billion people by 2030.

6. **The rise of distributed renewable energy (DRE) solutions[11] and business models provide transformative energy access acceleration opportunities in Africa, if accompanied by adequate support.** Advances in solar energy, battery storage, energy efficiency, and smart digital applications have dramatically reduced costs, making DRE a highly attractive complement to traditional centralized grid systems. This has led to the emergence of innovative, private-sector-driven business models that are reshaping energy access that are particularly applicable in Sub-Saharan Africa, where it is economically unviable for low-income populations across vast, sparsely populated areas to access the grid. DRE technologies are estimated to already service around 100 million people on the continent[12]. Based on least-cost geospatial planning, it is estimated that about 50 percent of future connections will have to come from DRE solutions, requiring US$50 billion investments[13]. To close the gap towards the universal electricity access, DREs would need to serve additional 250-300 million people by 2030. Investments in the DRE sector need to be scaled up to support this ambition.

7. **Private mobilisation of capital needs to increase and become available to a broader range of technologies, geographies, developers and users in order to ramp up investment in access focused DRE efforts.** Some DRE segments, such as those serving commercial and industrial (C&I) customers, are now fully or nearly commercial and increasingly attracting larger amounts of private sector financing. In contrast, electrification-oriented DRE segments (such as mini grids and standalone solar systems), as well as clean cooking, are lagging behind, with most of their growth funding still originating from philanthropic organizations and development finance institutions (DFIs).[14] Moreover, current DRE investments in Sub-Saharan Africa are highly concentrated in a few key markets. The seven largest standalone solar system companies account for about 70 percent of all equity and debt financing mobilized for standalone solar systems in Sub-Saharan Africa to date. Similarly, 80 percent of commercial financing in the mini grid sector has been deployed in six companies (mostly equity)[15]. There is a clear growing need for start-up financing and seed capital, which has demonstrably decreased over the past few years.[16] Furthermore, while FCV countries could present a significant opportunity for DRE electrification (given the low electrification rates and the lack of grid infrastructure), financing flows into FCV markets have been slow. Enabling strategic private sector flows to more mature 'scale-up' companies and market segments would free up DFI/concessional finance to target smaller companies and less mature market segments.

[9] World Bank/ESMAP: Beyond energy multi-tier framework surveys in multiple SSA countries
[10] WHO/World Bank: trackingsdg7.esmap.org (2023 update, data as of 2021)
[11] DRE solutions include a range of technologies and equipment such as DRE systems (e.g., stand-alone solar lanterns, solar home systems, stand-alone wind systems, small hydro systems and renewable energy powered mini-grids), clean cooking solutions, productive uses equipment and e-mobility solutions that aim to benefit households, productive users and public institutions, as well as commercial and industrial users. Clean cooking is sometimes highlighted separately to emphasize that energy access is more than access to electricity.
[12] As per ESMAP data for: ESMAP/World Bank: Mini Grids for Half a Billion People, Market Outlook and Handbook for Decision Makers, 2022; and World Bank, IFC, GOGLA and CLASP: Off-Grid Solar Market Trend Report, 2022
[13] IEA, IRENA, UNSD, World Bank, WHO. 2024. Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC. Also, based on geospatial modelling (ESMAP: Global Electrification Platform: electrifynow.energydata.info), about 55% of all connections between now and 2030 will be best served by DREs. Depending on the composition of mini grids and solar home system, the costs would amount between US$33 and US$ 62 billion.
[14] They tend to be funded directly by DFIs or by funds/impact investors which may be private but also sourcing their financing from DFIs.
[15] ESMAP: Mini Grids for Half a Billion People, 2022
[16] As per analytics and consultations carried out for the Project preparation.

8. **Private capital mobilization for electrification-oriented DRE and clean cooking companies is held back by multiple barriers and market failures, that restrict the flow of equity investment into the sector.** DRE businesses are often seen as high-risk by investors, due to factors such as lower profitability, vulnerability to macroeconomic shocks, and limited access to international capital. These challenges are compounded by the relatively small size of many DRE companies, which makes it difficult for investors to derive a meaningful portfolio of investments unless there is line of sight to a significant project pipeline. As a result, most capital flows to a handful of larger DRE companies, leaving smaller firms which could be effective in FCV markets, severely undercapitalized. In addition to these structural barriers, high transaction costs, long investment horizons, and limited exit options further discourage equity investors from engaging with the sector. This combination of challenges limits the pool of available private capital for DRE solutions across Africa, despite clear demand. Overcoming these challenges is critical to unlocking private capital towards facilitating the expansion of DRE.

9. **Equity funding mobilized through the M300 Patient Capital Facility (PCF) will play a critical role in accelerating the scale up of DRE and clean cooking.** Building on the WBG's regional facilities and country-specific operations including Accelerating Sustainable and Clean Energy Access Transformation (ASCENT; P180547) in AFE, Regional Distributed Access through Renewable Energy Scale-up (Regional DARES; P507938) and Regional Off-Grid Electricity Access Project (ROGEAP; P160708) in AFW, the PCF will bolster the WBG's toolbox by supporting the establishment and partial capitalization of a dedicated DRE investment platform. The platform will invest into DRE equity funds to be managed or co-managed by the implementing agency.

10. **Mission 300 integrates country-specific and regional initiatives to create a robust, sustainable DRE ecosystem.** This harmonized approach ensures that national efforts are reinforced by regional initiatives, maximizing impact on energy access and sectoral growth across Africa. A cornerstone of this strategy are the Mission 300 national energy compacts, through which participating governments commit to concrete policy and regulatory reforms that enable private sector participation, unlock financing and accelerate DRE deployment. These compacts outline specific measures such as streamlining licensing processes, improving regulatory and tariff frameworks, and enhancing incentives for DRE, to create a more predictable and attractive investment landscape.

Relationship to CPF

11. **Achieving universal electricity access by 2030 is the World Bank's top priority for enabling sustainable development in Sub-Saharan Africa.** Within this context, the PCF directly contributes to Sustainable Development Goal #7, which aims for affordable and clean energy for all, and to Mission 300, the WBG's and AFDB's joint commitment to provide electricity access to 300 million people in Sub-Saharan Africa by 2030. The PCF is also closely aligned with the Global Challenge Program (GCP) on Energy Transition, Efficiency, and Access as outlined in the 2023 World Bank Evolution Roadmap, emphasizing access to clean energy as a critical driver for energy efficiency and transition in both the AFE and AFW regions.

12. **The Project will deploy principles of Maximizing Financing for Development and leverage the WBG DARES platform.** To enhance capital mobilization without crowding out other players, the PCF will channel IDA resources though a Fund of Funds (FoF) structure, that grows existing entities and supports new equity funds. Moreover, through the WBG DARES platform and its joint upstream analytics, the PCF will complement IFC and MIGA efforts to leverage private sector to expand DRE led energy access across the continent.

13. **The PCF will contribute to the World Bank's Climate Change Action Plan 2021–2025 and the Next Generation Africa Climate Business Plan, which identify universal energy access as one of the top priorities for energy sector engagements and an essential component of the global transition to clean energy.** It is aligned with the World Bank's

Green, Resilient, and Inclusive Development (GRID) approach, which pursues poverty eradication and shared prosperity with a sustainability lens. Expanding access to clean and resilient energy are key elements of the IDA20 Special Theme on Climate Change (Objective 3: Transition key systems for adaptation and mitigation, and Objective 4: Boost support to renewable energy).[17]

C. Proposed Development Objective(s)

14. The Project Development Objective (PDO) is to increase access to sustainable and clean energy in Sub-Saharan Africa.

Key Results (From PCN)

15. **The PCF's key results** will be measured and monitored through the following indicators**:**
   (a) People provided with access to electricity [number]
   (b) People provided with access to clean cooking [number]
   (c) Private capital mobilized [US$ million]
   (d) Greenhouse gas emissions reduced (tCO2e) [lifetime ERs]

D. Concept Description

16. **The proposed project will complement the *Accelerating Sustainable and Clean Energy Access Transformation: Regional Energy Access Financing Platform 2* (ASCENT-REAF2, P506221) operation as part of the World Bank's overarching strategy to mobilize private capital to scale up DRE and clean cooking.** REAF2 supports the establishment and partial capitalization of a dedicated DRE platform which will invest into DRE equity funds in AFE. PCF will complement REAF2 by providing additional funding for the DRE platform and expanding its scope by covering all of Sub-Saharan Africa.

17. **With an indicative financing of US$25 million, the project will consist of a single component.** The following is a brief description of the project. Additional details will be included in the Project Implementation Manual (PIM), the completion and adoption of which will be a project effectiveness condition.

18. **Component 1: Equity Financing for DRE and Clean Cooking companies** (indicative financing of US$25 million from the IDA regional window). This component will include the establishment and partial capitalization of a DRE Equity Fund of Funds (the "Fund") to be established and managed by Africa 50, which will provide investments through investee funds into DRE and clean cooking companies. Key design features of the Fund are summarized as follows and the details of the Fund operation will be included in the Fund Operations Manual (FOM) which will be a disbursement condition for this component.

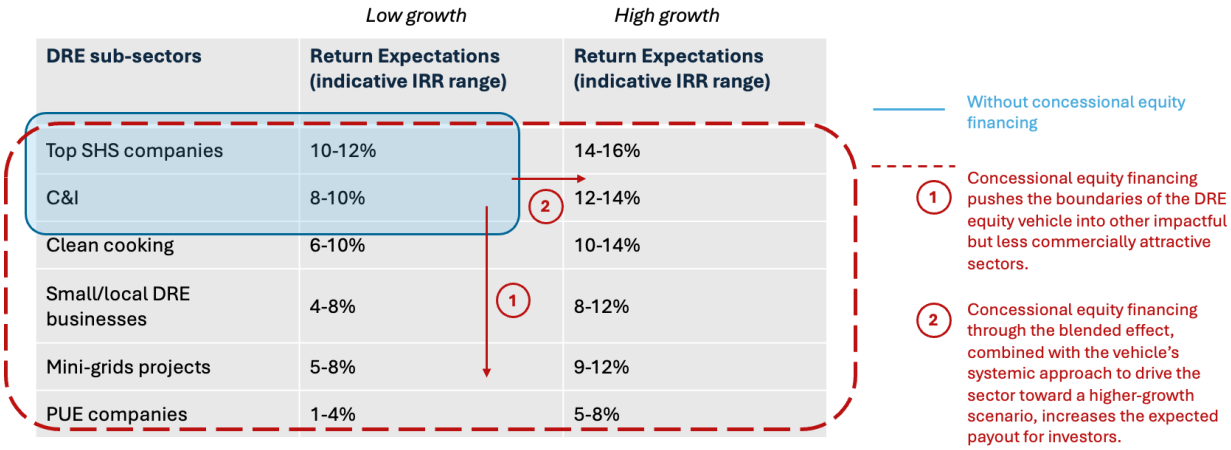
19. **Instrument and Portfolio Diversification:** The Fund will facilitate equity mobilization and market creation by investing in equity funds ("investee funds"), who, in turn, are expected to invest in a diversified portfolio of DRE companies that align with the Fund's investment strategy and comply with the World Bank requirements. Allocations of investments across investee funds will be detailed in the Fund Operations Manual (FOM). The adoption of the FOM will be a disbursement condition and initial allocations may be subject to adjustments to reflect changes in investment performance and market conditions. Both the Fund and investee funds may invest in local currency with terms and

[17] World Bank, *IDA20 Special Theme: Climate Change* (Washington, DC: World Bank, 2021), https://documents.worldbank.org/en/publication/documents-reports/documentdetail/374421625066951199/ida20-special-theme-climate-change.

conditions to be defined in the FOM. The FOM will also include a robust conflict of interest framework and required governance framework to protect the interest of investors as well as investee funds and companies. To enhance impact and diversify risks without crowding out other players, the Fund will support both existing and new funds. This investment strategy aligns with the World Bank Group's Maximizing Finance for Development (MFD) approach.

20. **Concessionality and Impact Driven:** The Fund will leverage regional IDA to attract high-impact equity investments in DRE companies across Sub-Saharan Africa with commensurate risk-return metrics. Its blended capital structure will enable the viability of long-term investments in market segments currently unattractive to commercial investors. More specifically, the PCF will contribute the "junior capital" tranche, necessary to absorb potentially higher loss rates and lower profitability of companies operating in critical high-risk segments of the DRE market (including solar home system, mesh/mini-grid, and clean cooking markets, see Figure 1 below). By narrowing the gap between risks and return expectations, the IDA-funded tranche is expected to mobilize "senior capital" contributions by other investors, including venture capital, private equity, and asset managers. In the longer term, it can pave the way for scaling up finance by attracting institutional investors (such as pension funds, insurance companies, and sovereign wealth funds) to the DRE sector.

Figure 1. Illustrative Impact of Concessional Equity Funding for Investee Funds



21. **Regional Coverage: All regional IDA funding channeled through the PCF will be fully fungible across AFE and AFW.** REAF2, being part of the ASCENT MPA operation, is designed to support DRE equity funds and companies across AFE. Project preparation activities for REAF2 indicated the need for additional funding for concessional equity for DRE companies across Sub-Saharan Africa. Therefore, the full fungibility of PCF funding is sought for two reasons:

(i) Many DRE companies operating in Sub-Saharan Africa have operations spread across both AFE and AFW, or are in the process of expanding across both sub-regions to diversify their markets; it also follows that this would be a promising investment strategy that enables a sustainable portfolio led approach that balances investments in newer geographies, particularly FCV countries and 'higher risk' projects, and comparably more mature markets.

(ii) Unlike "conventional" Investment Project Finance (IPF) that can easily be "tagged" to a specific country or region, the geographic earmarking and tracking of equity funds that have a geographic scope that extends across AFE and AFW, would likely slow down Fund operations and investment in such investee funds through cumbersome and potentially counterproductive reporting burdens.

Therefore, the full fungibility of funding delivered though the PCF is sought to provide the Fund with the needed flexibility to bridge funding gaps, meet specific needs and create specific windows (via investee funds)[18] that otherwise would not be eligible for support from ASCENT-REAF2 or an "AFW-only" investment facility.

Legal Operational Policies

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

22. **The proposed Environment and Social Risk rating is Substantial.** In accordance with BP/OP4.03, the Project would most likely be categorized as **FI-2 (Substantial)**. This categorization is based on the Bank's review of the prospective Project activities and institutional arrangements of its "twin project" under ASCENT REAF2's component 1. In accordance with BP/OP4.03 paragraph 21, it is expected that potential adverse E&S risks and impacts of subprojects will be few, generally site-specific, largely reversible, and readily addressed through mitigation measures. In this regard, while Africa50 has a robust ESMS which if applied as written, is capable of effectively managing the potential E&S risks and impacts of the project, it is best suited for direct equity investment operations. However, the PCF, in addition to direct investments, will also be supporting indirect equity investments. Therefore, at preparation, the level of Africa50's capacity to assess the commitment and ability of future investee funds to manage E&S risks associated with DRE subprojects, is yet to be established. Moreover, given the "first-of-a-kind" character of the proposed IDA operation, the Bank is yet to ascertain the effectiveness of Africa50's application and compliance with its ESMS. While their ESMS has proven to be robust, Africa50 neither has experience in DRE-related, nor in indirect investments. This means the effectiveness of Africa50s tools for Environmental and Social Due Diligence (ESDD) and monitoring of financial intermediaries are yet to be tested under new circumstances. Consequently, there is a risk that Africa50 may fail to appropriately assess the E&S management capacities of the investee funds, and it is not clear at this stage whether Africa50 has adequate staff capacity to offer the needed level of support for E&S management to the investee funds, should this become necessary.

CONTACT POINT

World Bank

[18] For example, a possible investee fund with Nigeria Sovereign Investment Authority focusing on Nigeria.

Jan Friedrich Kappen
Lead Energy Specialist

Yabei Zhang
Senior Energy Specialist

Aparna Gangavati Rao
Senior Energy Specialist

Borrower/Client/Recipient

Africa50

Implementing Agencies

Africa50
Raza Hasnani
Managing Director, Project Finance
r.hasnani@africa50.com

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):	Jan Friedrich Kappen, Yabei Zhang, Aparna Gangavati Rao

Approved By

Practice Manager/Manager:	Ani Balabanyan	15-Apr-2025
Country Director:	Franz R. Drees-Gross	24-Apr-2025