

**PROJECT INFORMATION DOCUMENT (PID)
IDENTIFICATION/CONCEPT STAGE**

Report No.: PIDC26149

Project Name	ENREP- Carbon Finance Programme of Activities
Region	AFRICA
Country	Ethiopia
Sector(s)	Other Renewable Energy (50%), General energy sector (50%)
Theme(s)	Climate change (100%)
Lending Instrument	Lending Instrument
Project ID	P155859
Borrower Name	FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
Implementing Agency	Development Bank of Ethiopia
Environment Category	C - Not Required
Date PID Prepared	15-Sep-2015
Estimated Date of Approval	31-Oct-2015
Initiation Note Review Decision	The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Ethiopia is a large and diverse country. It is located in the Horn of Africa and is landlocked with an area of 1.1 million square kilometers. Ethiopia's biophysical environment includes a variety of contrasting ecosystems, with significant differences in climate, soil properties, vegetation types, agricultural potential, biodiversity, and water resources. Ethiopia is a country of many nations, nationalities, and people, with a total population of 91.7 million (2012) and an annual growth rate of 2.6 per cent. At that rate the United Nations (UN) estimates that Ethiopia's population will reach 130 million by 2025, and it is projected to be among the world's ten largest countries by population by 2050. Only 17 per cent of the population lives in urban centers, with the great majority of them living in Addis Ababa. Ethiopia is vulnerable to terms of trade shocks from international food and fuel prices, and to large domestic weather-related shocks, as the 2011/12 East Africa drought demonstrated.

Ethiopia remains one of the world's poorest countries, but has achieved high levels of economic growth, and made substantial progress on social and human development over the past decade. Economic growth averaged 10.9 percent per year since 2004, compared with the regional average of 5.4 percent. The country's per capita income of US\$550 (2014) is substantially lower than the regional average of US\$1,257 and among the ten lowest worldwide. Ethiopia is ranked 173 of 187 countries in the Human Development Index (HDI) of the United Nations Development Programme (UNDP). However, economic growth has helped reduce poverty in both urban and rural areas. Poverty incidence measured by the population living below the international extreme poverty line of US\$1.25 PPP fell from 55 percent in 2000 to 31 percent in 11 years. Finally, Ethiopia is among

the countries that have made the fastest progress on the Millennium Development Goals (MDGs) and HDI ranking over the past decade.

The Government of Ethiopia (GoE) just completed the implementation of an ambitious Growth and Transformation Plan (GTP) 2010/11–2014/15, which sets a long-term goal of becoming a middle-income country by 2023, with growth rates of at least 11.2 percent per annum during the plan period. To achieve the GTP goals and objectives, the GoE has followed a “developmental state” model with a strong role for the government in many aspects of the economy. It has prioritized key sectors, such as industry and agriculture, as drivers of sustained economic growth and job creation. The GTP reaffirms the GoE’s commitment to human development. Development partners have programs that are broadly aligned with the GTP priorities. The second GTP (2015-2020) is still at finalization stage and will be released soon.

The WBG Country Partnership Strategy (CPS) for FY2013-2016 sets out the principles for engagement within this framework, as recently reviewed in the 2014 CPS Progress Report. The CPS supports the GoE in implementing the GTP. It includes two primary pillars, and seven strategic objectives. Pillar One (Fostering competitiveness and employment) aims to support Ethiopia in achieving the following strategic objectives: (i) a stable macroeconomic environment; (ii) increased competitiveness and productivity (a particular focus for IFC); (iii) increased and improved delivery of infrastructure; and (iv) enhanced regional integration. Pillar Two (Enhancing resilience and reducing vulnerabilities) aims to support Ethiopia through: (v) improving the delivery of social services; and (vi) comprehensive social protection and risk management. The CPS also has a foundation of (vii) good governance and state building. In line with the GTP, gender and climate change have been included as cross-cutting issues in the CPS. The CPS Progress Report reconfirmed these strategic objectives, while noting the WBG will place renewed emphasis on a stable macroeconomic environment; increased competitiveness and productivity; regional integration; and the urbanization process.

Sectoral and Institutional Context

Since the implementation of the last five-year plan, the electricity sector in Ethiopia has been growing at a rapid pace. More than 41 percent of rural towns and villages were connected to the grid, and the number of consumers connected grew from 800,000 in 2005 to more than 2.4 million currently. With the increase in access, demand for electricity also increased. The average demand growth rate of electricity was above 15 percent per year during 2005–2010 (about 25 percent and 32 percent, in fiscal year (FY) 2010 and FY 2011, respectively). This growth in demand has created a supply-demand imbalance between 2008-2009. However, since 2010 there is enough generation capacity but the system is still facing major transmission and distribution network constraints

To address the challenge of low access rates, the GoE plans to scale up grid connectivity, as well as expand off-grid energy programs. The target, as set forth in the GTP1, was to expand the coverage of electricity services to 75 percent of towns and villages, and to increase the number of consumers connected to the grid to 4 million by end 2015. The GoE is therefore below the target but plans to expand the grid access through intensification programs and using new electrification strategy to meet more ambitious targets under GTP2 (2015-2020) .

Promotion of off-grid energy programs is also an essential part of the strategy to increase access. The GoE plans to increase the adoption of off-grid renewable energy and energy efficiency

products for households who are unable to afford the cost of grid connection, or are far from grid-connected areas. Many countries in the region have experienced success in expanding the coverage of modern energy services, especially when it comes to efficient lighting and cooking. The GoE has also implemented many such programs including improved cook-stove, biogas, solar home systems, etc. However, access to finance remains a key constraint for scaling up of such interventions. As it takes several years for electricity grid to reach the rural population, adoption of renewable energy and energy efficiency interventions is an important part of the GoE's plan of increasing access to modern energy services more rapidly.

The Electricity Network Reinforcement and Expansion Project (ENREP), approved by the Board in May 2012, addresses this challenge through its component 3 "Market Development for Renewable Energy and Energy Efficient Products". The component 3 of ENREP aims to develop the market for renewable energy products and services in Ethiopia through two lines of credit. One is supporting the working capital requirements of project developers (Private Sector Enterprises-PSEs, Small and Medium Enterprises-SMEs, etc.) and the other is providing on-lending support to Micro Finance Institutions (MFIs) which provide credits to households to access renewable energy products. The component is implemented by the Development Bank of Ethiopia (DBE) in collaboration with the Ministry of Water Irrigation and Energy (MoWIE) and MFIs. This grant is in line with the agreement during ENREP appraisal that "Unless the GoE has alternative arrangements to secure the carbon reduction benefits, the Bank will assist DBE in designing and implementing a carbon finance program using methodological approaches that are already proven and tested to claim carbon benefits that would result from implementation of renewable energy and energy efficiency measures under Component 3.

Relationship to CAS/CPS/CPF

The World Bank Group's CPS with Ethiopia (FY2013-2016) highlights the need for increased access to electricity, and targets to increase off-grid electricity uses from 16.5 million people in 2012 to 60 million people in 2016 (outcome 3.1 of the strategic objective number 3 "Increase and improved delivery of infrastructure"). In addition, climate change have been included as cross-cutting issues in the CPS. This grant will contribute to this objective by supporting ENREP component 3.

II. Project Development Objective(s)

Proposed Development Objective(s)

The Proposed Development Objective of the grant is to build the capacity of DBE to manage and coordinate carbon finance activities.

Key Results

Key results to be achieved under the grant are:

- a) Two Emission Reduction Purchase Agreements (ERPAs) are signed to enable access to carbon revenues with the Carbon Initiative for Development (Ci-Dev).
- b) Monitoring, reporting and verification (MRV) mechanism for greenhouse gas (GHG) emission reductions is established.

III. Preliminary Description

Concept Description

This grant supports the implementation of component 3 of the ENREP- Market Development for

Renewable Energy and Energy Efficient Products (MDREEEP). Development of stand-alone renewable energy programs such as Solar Home Systems (SHSs), solar lanterns, improved cook-stoves, biogas plants, and similar activities will support the expansion of access to energy services; especially in areas that are not yet connected to the grid. The target beneficiaries for this component will be the households and villages that are outside the reach of the grid as well as those that are in the grid area but are unable to afford the connection and usage fees.

The grant funded activities aim to build capacity of DBE in managing and coordinating carbon finance activities. DBE will coordinate with the World Bank as the trustee of Ci-Dev fund to support development of off-grid renewable energy sector in the Ethiopia. Major activities to be carried out by DBE under the grant include the following.

For result a), two ERPAs are signed,

- DBE will carry out consultations with key implementing partners including MoWIE and service providers to agree on carbon revenue sharing arrangement;
- DBE will implement operational procedure on eligibility screening, monitoring of carbon revenue sharing so that DBE can perform as the responsible party for eligibility screening and integrate them into the review process of loan proposals.
- DBE will establish disbursement triggers of carbon revenues.

For result b), MRV mechanism is established,

- DBE will supervise the development of monitoring software system and its deployment in the field;
- DBE will organize regional training on program implementation and monitoring for relevant stakeholders.
- DBE will cooperate with WB in the preparation of technical documents of two carbon programs.
- DBE will coordinate and participate in the validation/verification site visits of two carbon programs.

IV. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		x	
Natural Habitats OP/BP 4.04		x	
Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11		x	
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12		x	
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	0.65	Total Bank Financing:	0
Financing Gap:	0		
Financing Source			Amount

Borrower	0.2
Carbon Fund	0.45

VI. Contact point

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