PRIVATE SECTOR STRATEGY FOR ETHIOPIA'S CLIMATE RESILIENT GREEN ECONOMY (CRGE) FACILITY

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(Draft, not for official circulation)

Contents

Acronyms

AfDB	African Development Bank
BAU	Business As Usual
BDA	Business Development Assistance
CBE	Commercial Bank of Ethiopia
CRGE	Climate Resilient Green Economy of Ethiopia
DBE	Development Bank of Ethiopia
DFI	Developmental Finance Institution
EIB	European Investment Bank
ETB	Ethiopian Birr
ETS	Emission Trading Systems
FI	Financial Intermediary
FMSEDA	Federal Micro and Small Enterprise Development Agency.
GHG	Green House Gases
GoE	Government of Ethiopia
GP	General Partner
GTP	Growth and Transformation Plan of Ethiopia
IFC	International Finance Corporation
IZ	Industrial Zones
LC	Letter of Credit
LOC	Line of Credit
LP	Limited Partner
LSP	Local Service Provider
MEF	Ministry of Environment & Forests
MFI	Micro Finance Institution
MOFED	Ministry of Finance and Economic Development of Ethiopia
MWIE	Ministry of Water, Irrigation and Energy
MRV	Monitoring, Reporting, and Verification
NBFI	Non-Banking Financial Institution
NPC	National Planning Commission
PE	Private Equity
R&D	Research & Development
REDD	Reducing emissions from Deforestation and Forest degradation
REMDF	Renewable Energy Market Development Fund
SSA	Sub Saharan Africa
TA	Technical Assistance
UNFCCC	The United Nations Framework Convention on Climate Change
VC	Venture Capital

1. Introduction & Background

Ethiopia's economic growth, coupled with its large population and significant land mass, has attracted the attention of the international community. Over the last ten years, the country has achieved double digit growth in real terms, averaging 10.6% per year, which is the second fastest in Africa after Angola and even surpasses that of China (10.2%). Growth is expected to continue at a rapid pace.

These growth rates are the fruit of years of investment and reform that have seen the country entrench economic, social and political stability. Prior to 2004, the economy was extremely volatile, experiencing violent contractions in 1985, 1992, 1998 and 2003, with a milder recession in 1989. Economic vulnerability was driven by an unfortunate blend of unfavorable weather conditions, armed conflict and policy that undermined access to food. The result was a series of famines, the worst of which made world headlines in 1985.

After more than two decades of civil war, the effects of which were exacerbated by international conflicts with Somalia (1977 and 1998) and Eritrea (1999), Ethiopia has now enjoyed more than a decade of peace under the ruling Ethiopian People's Revolutionary Democratic Front (EPRDF) - a coalition of former rebels that formed a unity government with the primary goal of eradicating poverty by delivering economic growth and transforming the structure of the economy. To this end, the government has developed three successive blueprints as indicated below that have been implemented with success:

- The Sustainable Development and Poverty Reduction Program (SDPRP), implemented from 2002/03 to 2004/05
- The Plan for Accelerated and Sustained Development to End Poverty (PASDEP), implemented from 2005/06 to 2009/10 and
- The Growth and Transformation Plan (GTP), covering the economic transformation of Ethiopia as its main objective which has since been pursued.

The success of these state guided poverty reduction and economic development strategies have been the key drivers for Ethiopia's economic transformation and growth culminating in the ruling government obtaining more than 90% of votes in the 2010 elections. The strength of this mandate has helped to make it possible for the Ethiopian state to continue to deliver the economic results the country so badly needs, yielding success where a weaker state might have failed, given the odds.

As a follow up to GTP, the government of Ethiopia launched GTP II aimed at ensuring rapid domestic private sector transformation to enable the private sector be the engine room of growth. GTP II aims to achieve an annual average real GDP growth rate of 11 percent within a stable macroeconomic environment while at the same time pursuing aggressive measures towards rapid industrialization and structural transformation.

In order to achieve the objectives of GTP II, the following pillar strategies will be pursued[1]:

a) Sustaining the rapid, broad based and equitable economic growth and development witnessed during the last decade including GTP I;
b) Increase productive capacity and efficiency to reach the economy's productive possibility frontier through rapidly improving quality, productivity and competitiveness of productive sectors (agriculture and manufacturing industries);
c) Enhance the transformation of the domestic private sector to enable them become a capable development force;
d) Build the capacity of the domestic construction industry, bridge critical infrastructure gaps with particular focus on ensuring quality provision of infrastructure services;
e) Proactively manage the on-going rapid urbanization to unlock its potential for sustained rapid growth and structural transformation of the economy;
f) Accelerate human development and technological capacity building and ensure its sustainability;
g) Continue to build democratic and developmental good governance through enhancing implementation capacity of public institution and actively engaging the citizens;
h) Promote women and youth empowerment, ensure their effective participation in the development and democratization process and enable them equitably benefit from the outcomes of development;
i) Building climate resilient green economy;

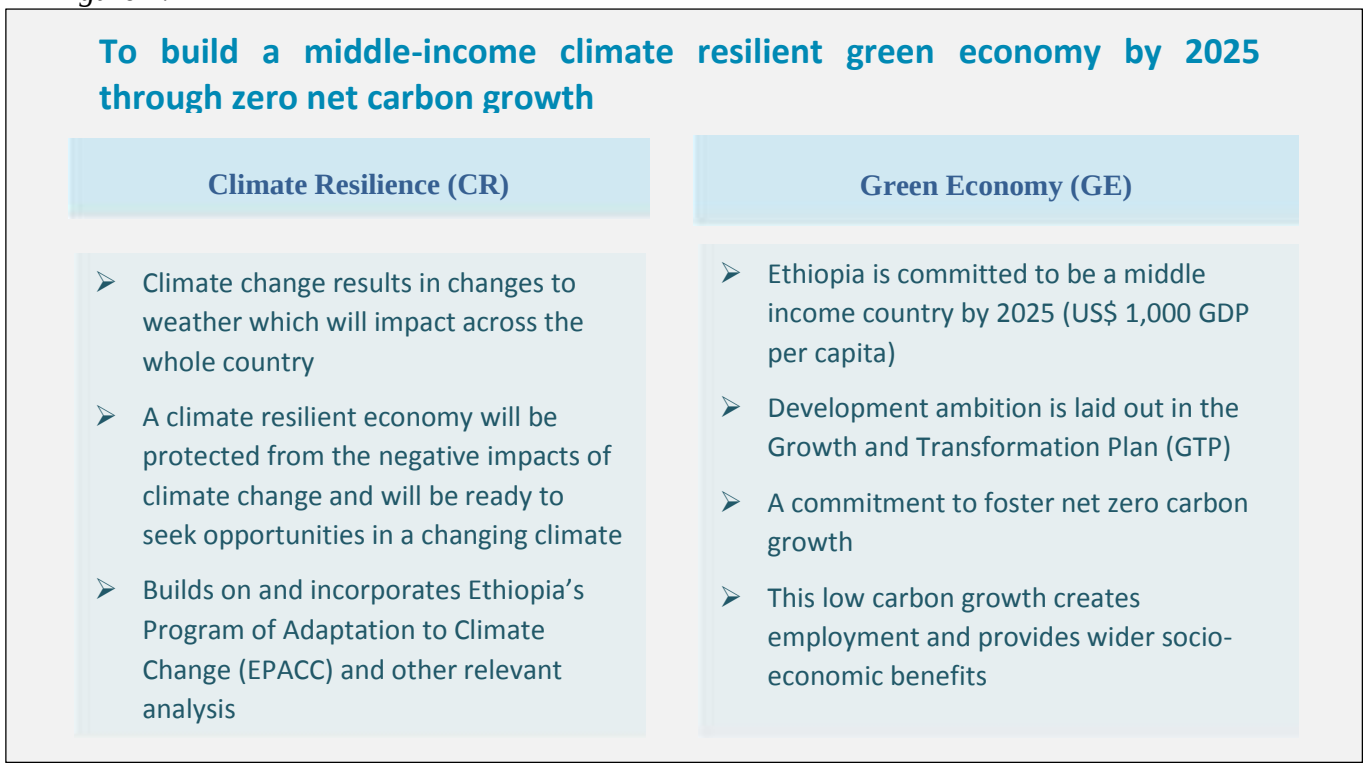
Ethiopia has historically experienced the effects of climate change leading to severe droughts more or less once every ten years and these contributed to the challenges of the country. Besides the challenges that climate change presents it also presents the necessity and opportunity to switch to a new sustainable development model and this has rightly been identified as a strategic pillar under GTP II.

[2]The CRGE initiative was officially launched on 8 December 2011 in Durban, South Africa by H.E. Mr. Meles Zenawi, then Prime Minister of Ethiopia, during the Seventeenth session of the Conference of the Parties of the UNFCCC. The vision of the initiative is encapsulated in Figure 1.1 below.

The Government of the Federal Democratic Republic of Ethiopia has commenced implementation per the building of a Climate-Resilient Green Economy (CRGE) under GTP II to protect the country from the adverse effects of climate change as well as help realize its ambition of reaching middle-income status before 2025 with net-zero greenhouse gas (GHG) emission growth.

[1] GTP II for Development Partners; Ethiopia's National Planning Commission.
[2] CRGE Facility Operations Manual.

Figure 1.1



Foremost was the development of the Ethiopian Climate Resilient Green Economy (CRGE) Strategy which identified several initiatives which will ultimately lead to GHG emission reduction and resilience building.

The CRGE Strategy identified the following pillars upon which Ethiopia's Green Economy will be built.

- **Agriculture**: Improving crop and livestock production practices for higher food security and farmer income while reducing emissions
- **Forestry:** Protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks
- **Power:** Expanding electricity generation from renewable energy for domestic and Regional markets
- **Transport, industrial sectors and buildings**: Leapfrogging to modern and energy efficient technologies

The CRGE strategy and associated initiative led to the establishment of new institutions, new efforts in capacity building and financial resource mobilization, and has triggered comprehensive climate risk and vulnerability analyses.

A critical part of the institutional arrangements is the CRGE Facility (The Facility), the national financing mechanism that has been created alongside a CRGE Secretariat (The Secretariat) under MOFED to support the implementation of the CRGE.

To this end, The Facility has been providing financing for public sector led CRGE initiatives. This document outlines the overarching framework policy/guiding principles, range of private sector and potential partnership arrangements; defines mode of engagement and private sector access modalities to The Facility; appropriateness, role and responsibility of financial intermediaries, and guidelines to govern the relationship between MOFED/Facility and FI's with regard to management of climate finance.

2. Ethiopia's CRGE Initiative & Facility[3]

2.1. Components of the CRGE Initiative

The CRGE architecture has been developed to enable a programmatic and transformative approach for implementing relevant activities that minimizes the transaction costs, fragmentation and duplication associated with a project-based approach. As far as possible, the architecture also embeds CRGE systems within existing mechanisms for economic and environmental planning and implementation.

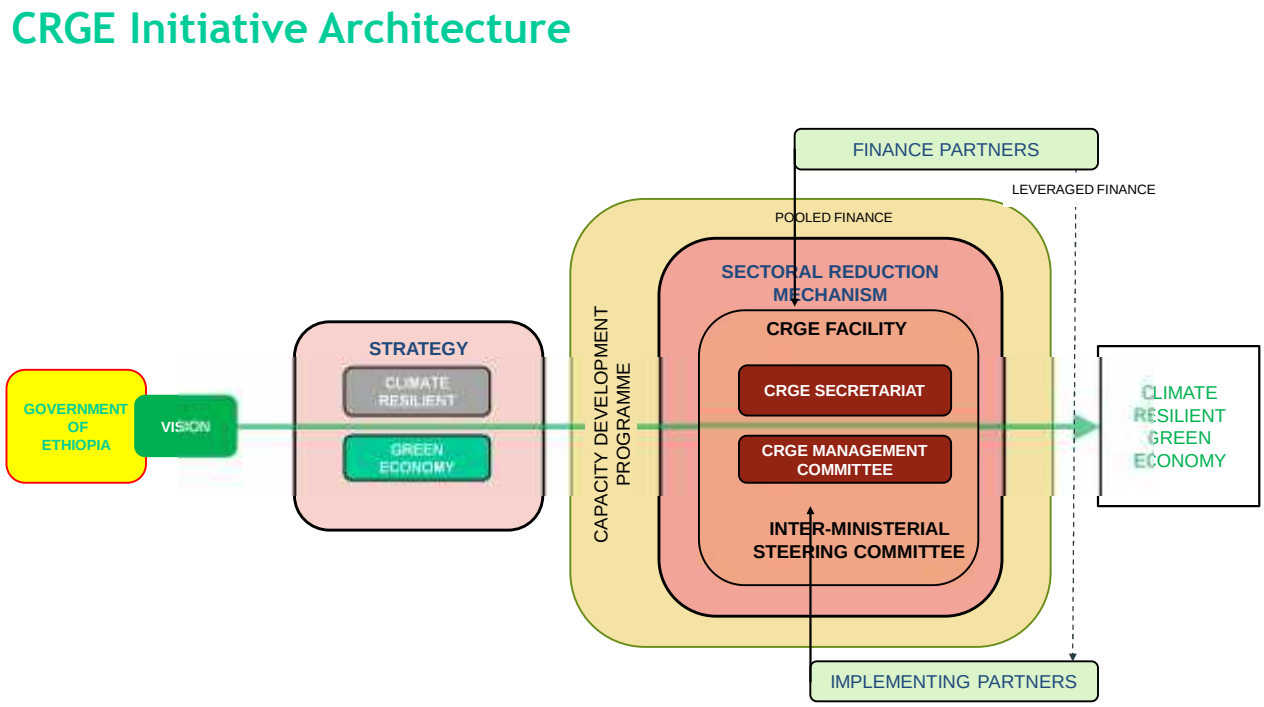
The system created to help convert the CRGE vision into practical action on the ground, and thus bring about a climate resilient green economy using the Sectorial Reduction Mechanism (SRM). Supporting the operation of the SRM are four core institutions:

- **The Inter-Ministerial Steering Committee:** chaired by the Prime Minister's Office, the Committee sets the criteria and scope for approving action plans, and determine the overarching priorities for the CRGE Facility;
- **The CRGE Management Committee**: a standing committee comprising State Ministers and senior experts of Government line ministries and the National Planning Commission, responsible for providing general oversight for the CRGE initiative as well as determining the optimum allocation of available funds to approved actions and alignment with the GTP;
- **The CRGE Facility "Facility"**: the Government of Ethiopia's national vehicle established to help mobilise, blend, combine and sequence domestic and international, public and private finance to support the institutional building and implementation of Ethiopia's CRGE Strategy.
- **The CRGE Secretariat:** undertakes day-to-day management of functions of the CRGE Facility. The Technical team of the Secretariat is housed by the Ministry of Environment and Forest (MEF) and is responsible for the development of standardised guidance, ad-hoc sector specific support and technical back stopping for the SRM, and quality assurance for Sector Reduction Actions in line with agreed guidance and criteria. The Finance team and Implementation Unit of the Secretariat are housed in MOFED.

The architecture of the CRGE initiative is illustrated in Figure 2.1 below.

[3] CRGE Facility Manual

Figure 2.1: The Architecture of the CRGE Initiative



2.2. The Sectoral Reduction Mechanism

The Sectoral Reduction Mechanism (SRM) is an economy wide system for reducing vulnerability and GHG emissions in ways that contribute to strong economic development in Ethiopia. Put simply, the SRM is a mechanism for mobilizing action and finance and thereby for implementing the CRGE vision on the ground.

The purpose of the SRM is to plan the implementation of actions, and facilitate the allocation of required finance. It does this by providing technical and quality assurance for planning and financial assistance for both the preparation and the implementation of reduction actions across the economy. It will eventually be fully aligned with national planning and budgeting processes in Ethiopia in the GTP.

The SRM has three specific aims, namely to:

- Mainstream green growth and resilience into Ethiopia's broader development activities;
- Ensure that Ethiopia's efforts are aligned and coordinated; and
- Leverage significant additional investment toward action on the ground.

The SRM process is split into five broad steps, covering planning, review and quality assurance, finance allocation and monitoring and evaluation of investments:

1. Develop and Validate Sector Reduction Action Plans (SRAPs);
2. Sector Wide Reduction Action Plans(SWRAps)

3. Technical and Financial Review of SRAPs;
4. Financial Mobilisation and Allocation of investment;
5. Monitoring, Evaluation and Reporting of Results.

2.3. The CRGE Facility

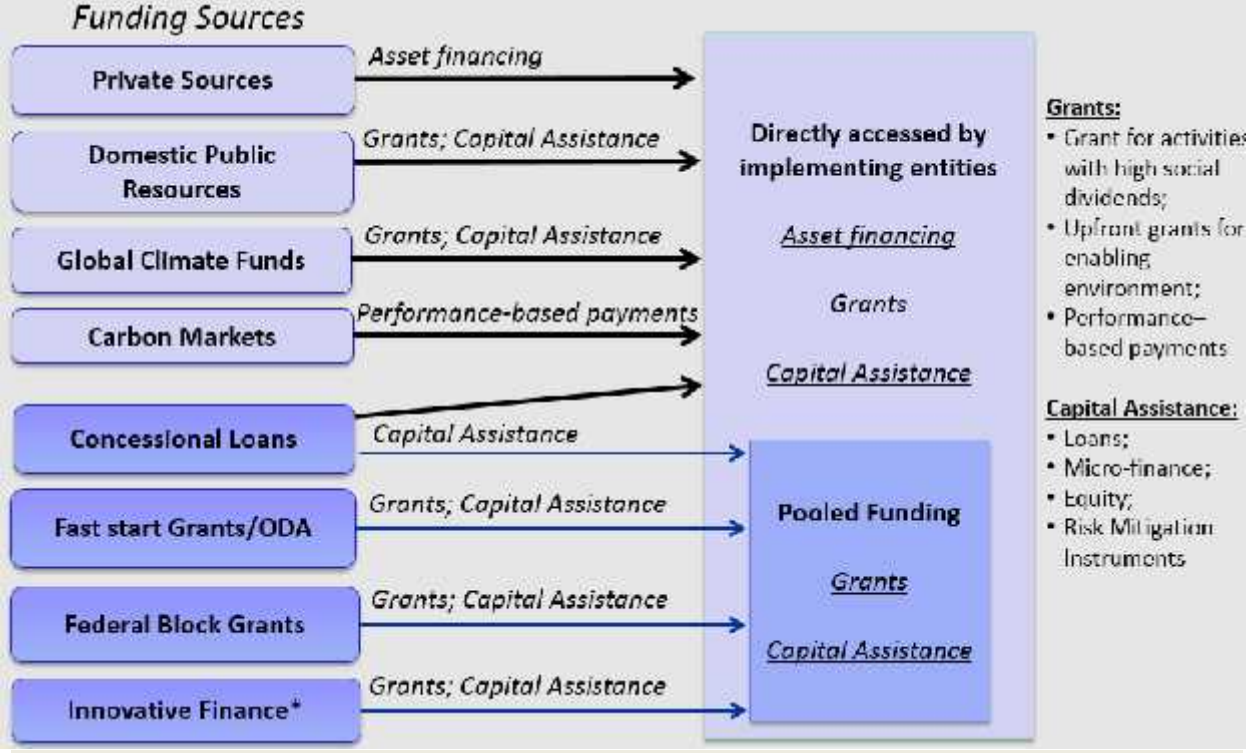
The CRGE Strategy recognizes that most bilateral and multilateral climate funds need a medium through which funds may be channeled for climate related activities and thus provisioned for such by instituting and accrediting the CRGE Facility.

The CRGE Facility sits in and is staffed by the Ministry of Finance and Economic Development (MOFED) and MEF, with additional support from national and international technical advisers on request. It coordinates closely with other key sector institutions including the National Planning Commission (NPC) and the Prime Minster Office (PMO). The objectives of the CRGE Facility are as follows:

1. **Financial moblisation and allocation:** The CRGE Facility is the Government's vehicle to mobilise, access and combine domestic and international, public and private sources of finance to support the institutional building and implementation of Ethiopia's CRGE Strategy;
2. **Stakeholder coordination**: The CRGE Facility provides a single engagement point where the Government, development partners, the private sector, civil society and other stakeholders can engage and make decisions about how best to utilise available finance in the pursuit of the CRGE vision and goals; and
3. **Unlocking capital at scale** - blending investment sources and leveraging: the CRGE Facility will use climate finance to complement other existing forms of investment to bolster Ethiopia's core climate-compatible development activities, thereby promoting the full integration of CRGE with the GTP.

Figure 2.3 highlights the potential types of finance that the CRGE initiative hopes to attract, either by pooling funds and direct access for allocation to actions, or alternatively in using the pool to foster compliance with international standards and requirements and thus help leverage additional finance.

Figure 2.3 - Potential CRGE Funding Sources and Access Arrangements



* Potentially including Payment for Ecosystem Services, Green Diaspora Bonds, Levies and Carbon Taxes

The expectation is that Ethiopia's development partners will increasingly channel relevant bilateral and multilateral climate funds through the CRGE Facility, which also provides opportunities to use climate finance to complement other existing forms of investment and thereby bolster Ethiopia's core climate-compatible development activities (in areas such as food security, energy, infrastructure development and natural resources management).

In addition to increasing the scale of climate finance potentially available to the country, the CRGE initiative aims to enhance the coordination and targeting of its utilization, by providing a single coherent system within which development partners, the private sector, civil society and other stakeholders can engage and determine how best to invest in relevant actions.

Implementation of the CRGE Strategy will involve both mainstreaming climate change into existing development investments, and the introduction of new activities. Over time, it is anticipated that the CRGE initiative will go beyond greening the GTP and informing it to being fully integrated and aligned with it.

2.3.1. Scope of Work of the CRGE Facility

The CRGE Facility mobilizes and allocates all types of relevant finance to approved actions on a flexible and appropriate basis, through a range of financing instruments (in combination where relevant). This includes, but is not limited to, conditional and un-conditional grants and up-front financing, guarantees, loans and results-based payments. As such the Facility is responsible for:

- Helping to attract and secure funding that can be allocated to CRGE actions;
- Guide and advise parties interested in submitting SRAPs and investment proposals for funding;
- Help determine the optimum allocation of available funds to approved actions;
- Monitor, evaluate, verify and report on the results achieved by funded actions; and
- Provide fiduciary assurance to the providers of finance.

The CRGE Facility intends to access, and put to strategic use, finance that is available and relevant to the CRGE initiative. Finance will be used to make catalytic investments and to leverage new and additional finance including public investment by the government of Ethiopia. In particular, and within the scope of the responsibilities outlined above, the CRGE Facility aims to:

- Help mobilise a substantial amount of finance required for meeting the challenge of building a climate resilient green economy with zero net carbon emissions. Finance will come from various sources, in particular the government, private finance, development partners, carbon trading schemes and financial mechanisms of multilateral environmental agreements; and
- Channel financial support to those actions that contribute most to climate resilient low carbon 'green' growth. It achieves this by providing grants, guarantees for loans, co-financing, concessional loans or ex-post rewards in the form of payment for verified results. The financial support of the CRGE Facility will be directed through purpose-built 'windows' and can be used for actions such as capacity building, policy changes and programme investment with the aim of addressing specific costs and risks that negatively affect the viability of a climate resilient green investment in Ethiopia.

Some of the sources of finance are known and modalities for their management are readily available; others will be new to the country and will place unfamiliar demands on institutional capacity. The business model will need to incorporate flexibility in order to accommodate what will potentially be the diverse requirements of the providers of as well as the applicants for finance.

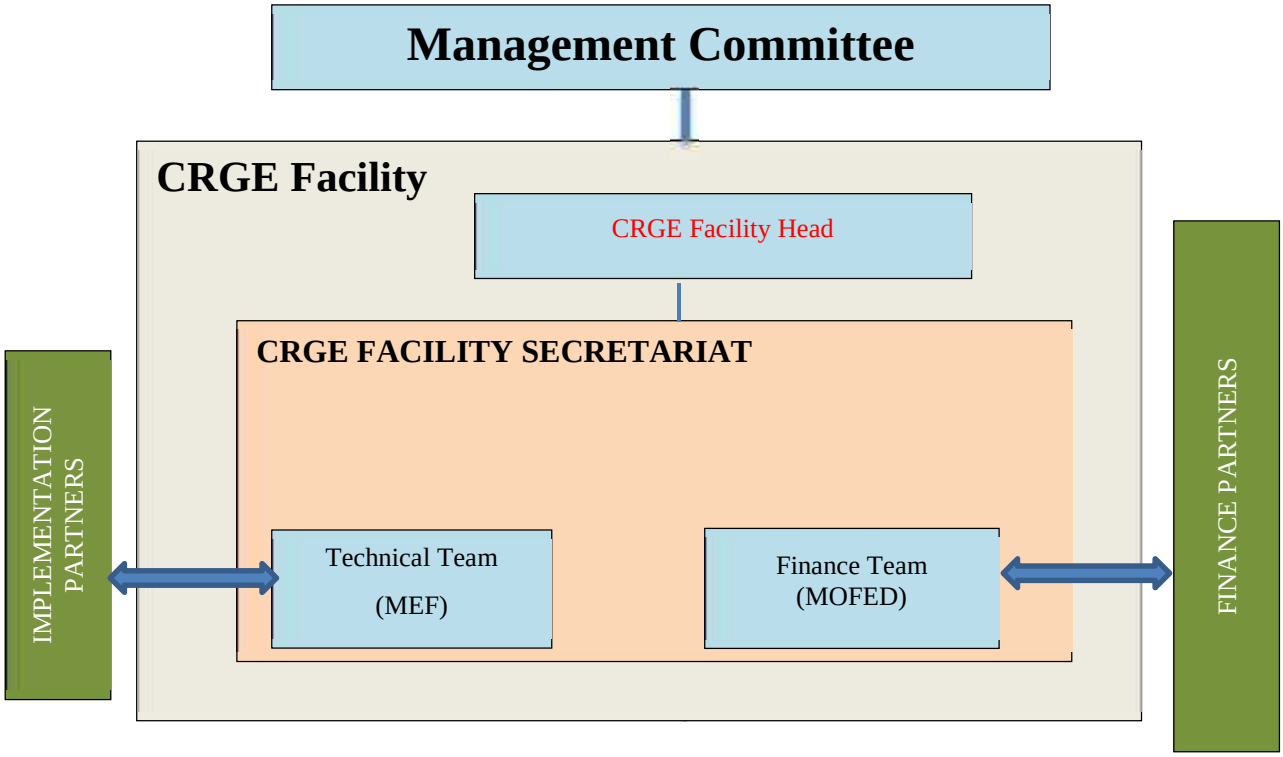
It is accepted that not all of the funds necessary to implement the CRGE Strategy will be channeled through the CRGE Facility. For example, civil society and private sector finance in the Ethiopian economy that contributes toward CRGE objectives may well not be channeled through the Facility.

The CRGE Facility will make catalytic investments with available funds that will be deployed strategically across the economy to leverage additional finance and thus help shift finance and investment toward priority CRGE investment areas, without necessarily seeking to manage the allocation and utilization of such investments. Without becoming part of the CRGE Facility's pooled fund, these investments would contribute to the achievement of the CRGE strategy.

2.3.2. *CRGE Facility Organisational Structure and Tools*

The design of the CRGE Facility builds on international best practice, and has been tailored to the unique circumstances and needs of Ethiopia, and its scope of work as outlined above. Its basic structure is illustrated in Figure 2.3.2a.

Figure 2.3.2a -Basic Structure of the CRGE Facility



The CRGE Facility secretariat comprises the Head of the Facility, Assistant Coordinator, the finance team and the technical team.

Under the auspices of the Management Committee, the Secretariat is seated in MOFED and MEF and is responsible for the overall management and coordination of The Facility's portfolio. To ensure it can fully discharge its responsibilities the Secretariat comprises:

- A **CRGE Facility Head** who is assigned by the State Minister for External Economic Cooperation of MOFED in consultation with the State Minister for Environment and Forest. The Coordinator reports to the Management Committee and is responsible for the day to day management of the Secretariat and efficient and effective operation of the Secretariat.
- **CRGE Facility Assistant Coordinator**, who by the State Minister for External Economic Cooperation of MOFED and provides support to the Facility coordinator coordinates the Secretariat and ensures effective and efficient operations
- A **Finance Team**, based in MOFED, provides administrative and analytical support necessary to the mobilisation, recording, allocation, management and oversight of pooled

funds, ensuring that the CRGE Facility satisfies its fiduciary responsibilities to all Finance Partners; and provides project implementation advice. It also provides all administrative and analytical support necessary to receipt and recording of proposals, liaison with the CRGE Technical Team, provides the coordination and facilitation of the Management Committee meetings, and monitoring, evaluation and reporting of approved actions.

- A **Technical Team**, led by MEF, provides technical support to the implementing entities to generate proposals and facilitates and leads the technical review of proposals. It is also responsible for the measurement, reporting and verification of emissions and vulnerability outcomes stemming from approved actions.

The Facility Head is under the direct supervision and control of the State Minister of External Economic Cooperation, working in close collaboration with the State Minister for Environment and Forest.

The primary tool of the Secretariat's Finance team is the Integrated Resources Mobilization Framework (IRMF), which consolidates the different elements of CRGE funds mobilization, allocation and management, as described in Figure 2.3.2b

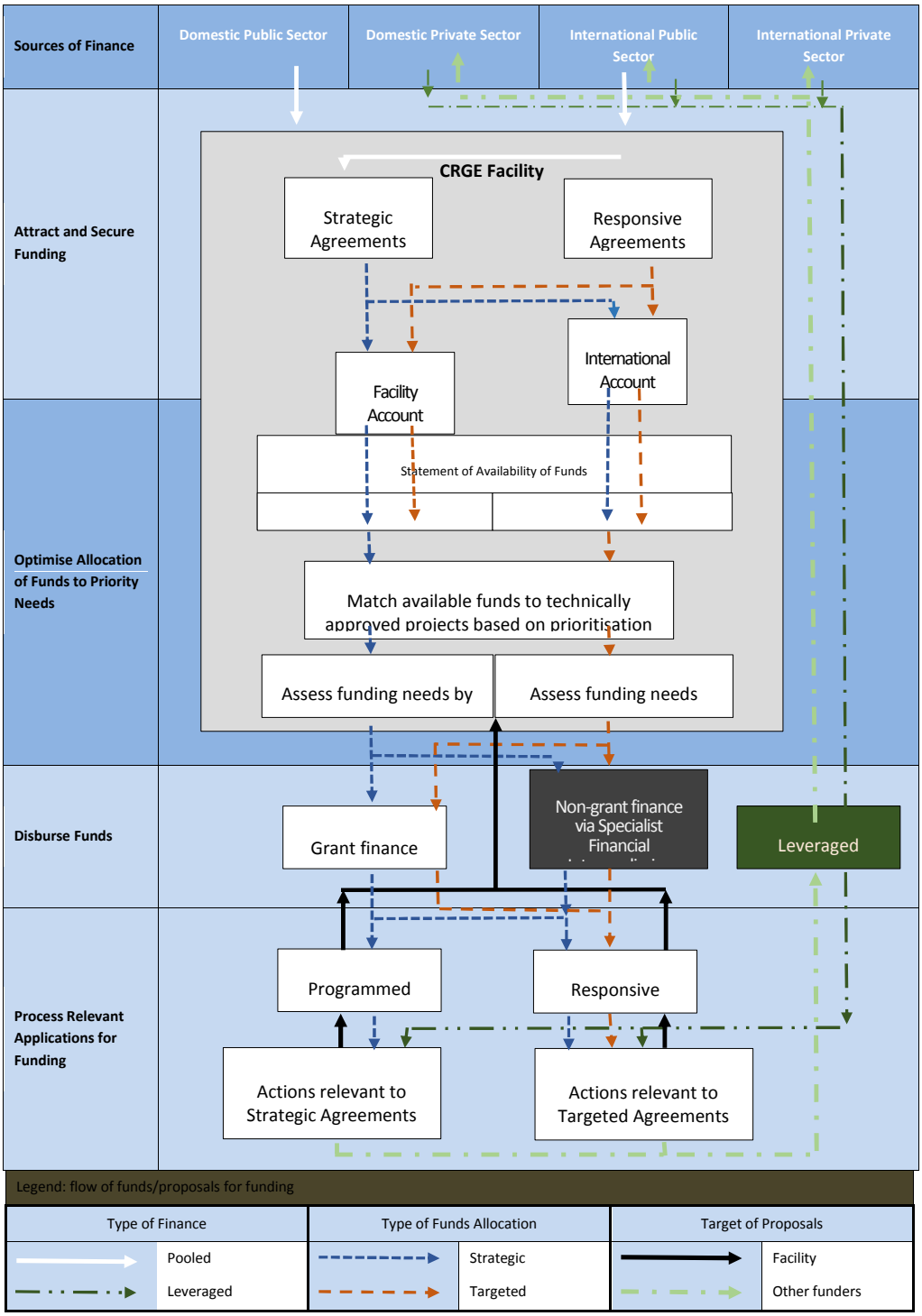
Figure 2.3.2b Integrated Resources Mobilization Framework (IRMF)

The IRMF is an essential tool that aims to:

- Project the overall flows of funds required to meet the objectives set by the CRGE Strategy and the SRM, as encapsulated in the CRGE Strategy Framework;
- Summarise the current availability of secured funds, according to any conditions attached to their provision;
- Identify specific funding gaps to be filled in order to meet the projected requirements of the SRM; and
- Determine financing options to meet projected requirements over time.

The IRMF sits at the heart of the CRGE Facility's operational model, illustrated in Figure 2.3.2c and designed to enable the effective mobilization and allocation of resources in the interest of strategic programming.

Figure 2.1.2c The CRGE Facility Operation Model


Sources of Finance
Domestic Public Sector
Domestic Private Sector
International Public Sector
International Private Sector
Attract and Secure Funding
CRGE Facility
Strategic Agreements
Responsive Agreements
Facility Account
International Account
Statement of Availability of Funds
Optimise Allocation of Funds to Priority Needs
Match available funds to technically approved projects based on prioritisation
Assess funding needs by
Assess funding needs
Disburse Funds
Grant finance
Non-grant finance via Specialist Financial
Leveraged
Process Relevant Applications for Funding
Programmed
Responsive
Actions relevant to Strategic Agreements
Actions relevant to Targeted Agreements
Legend: flow of funds/proposals for funding
Type of Finance
Pooled
Leveraged
Type of Funds Allocation
Strategic
Targeted
Target of Proposals
Facility
Other funders

3. Climate Finance

3.1. General Overview and Key Concepts

Climate finance[4] typically refers to the financial resources paid to cover the costs of transitioning to a low-carbon economy and to adapt to, or build resilience against, current and future climate change impacts. The term has gained prominence in climate policy discussions, due to increased appreciation of the need for and the challenges of mobilizing finance for climate related investments, and the role of the public sector in addressing risks, improving returns and closing knowledge gaps, to incentivize private investment at scale.

3.1.1. Challenges of Climate Change for Africa

Sub-Saharan Africa (SSA) has contributed the least to the global accumulation of greenhouse gas emissions: less than 4% of global CO2 emissions come from the African continent. However, this region will be more vulnerable to the impacts of climate change than any other. The Intergovernmental Panel on Climate Change (IPCC) predicts that by 2020, crop yields from rain-fed agriculture in SSA may fall by up to 50%, and 75-250 million people could be affected by increased water shortages. SSA is already highly susceptible to droughts, which are linked to decreases in agricultural yields and in turn, increases in food prices. Subsistence farmers, the majority of whom are women, are likely to be particularly affected. The region's vulnerability to climate change therefore creates a compelling case for SSA to receive significant funding for adaptation.

3.1.2. Funding Needs

The investment needs for 'greening' growth including addressing climate change, are already significant and will continue to increase. Greening investment at scale is a precondition for achieving sustainable growth. Globally, the investment required for the water, agriculture, telecoms, power, transport, buildings, and industrial and forestry sectors, according to current growth projections, stands at about US$ 5 trillion per year to 2020[5] This may require cumulative investments in green infrastructure in the range of US$ 36-42 trillion between 2012 and 2030, or approximately US$ 2 trillion or 2% of global GDP per year. Approximately US$ 1 trillion is being invested annually, leaving a US$ 1 trillion investment gap[6]. Recent analysis from the New Climate Economy further suggest that the global economy will require a cumulative US$ 89 trillion of investment by 2030, with an incremental investment of US$ 14 trillion over that same time to achieve low-carbon growth.

The World Bank estimates that between 2010 and 2050, the annual cost for adaptation to climate change in SSA will be at least US$18 billion, not including funding necessary to place SSA

[4] CPI Brief/2014/09/Climate-Finance-Brief-Definitions-to-Improve-Tracking-and-Scale-Up, Angela Falconer Martin Stadelmann
[5] World Economic Forum Green Investment Report, 2013
[6] OECD, Green Infrastructure Spending, 2013

countries on a low-carbon development pathway. While such financial estimates have been the subject of much debate, there is a general consensus that the level of financing currently reaching African countries is nowhere near enough to meet demonstrated needs, especially for immediate adaptation measures.

In Ethiopia, the CRGE Strategy estimates the investment need to be of the order of US$150-170 Billion out to 2030[7]. That amounts to an average of US$7.5 billion per year. Other estimates suggest that the overall cost of the Ethiopian power system expansion plan alone, which is dominated by renewables, is around $ 156 billion, spread over the next 25 years[8]. Also, in areas such as Disaster Risk Management[9], much of climate related, estimates suggest a need to US$1.2 Billion over 5 years, with less than half currently funded[10].

3.1.3. Sources of Funds, Use of Funds and Disbursements.

Climate Finance from Private Sources

Private finance flows from developed to developing countries will occur primarily through credit offsets in developed country emissions trading systems (ETS). By purchasing offsets to meet their domestic targets, developed country emitters, and their consumers, workers, and shareholders, ultimately finance emissions reductions in developing countries.

From the viewpoint of developed countries, these transfers are just as much an expenditure of societal resources as ODA and other public financing mechanisms.

Project Catalyst estimates that ETS credit offset programs in developed countries could deliver US$ 16–32 billion worth of mitigation in developing countries annually between 2010 and 2020. This estimate assumes not only more stringent caps on developed country emissions than currently proposed, but also that there are significant interventions to leverage the market[11] . Credits are currently granted under the CDM in a one-to-one ratio (1 unit of emissions reduction = 1 ETS emission reduction credit).[12]

Climate finance from public sources

Private finance arrangements must be an integral part of any global climate regime, but they will not be sufficient on their own. Public finance and other international sources must fill the gaps. Project Catalyst estimates that these sums can be raised via international transport levies (US$11–21 bn), concessional debt (US$ 4.2 –8.5 bn), a portion (10–15 percent) of the revenue

[7] Climate Resilient Green Economy Strategy, Ethiopia, 2011
[8] Ethiopian Power Systems Expansion Master Plan Study, Prepared for EEPC Interim Report, Volume 1, Executive Summary, Nov 2013.
[9] The Strategic Program Investment Framework
[10] Disaster Risk Management Strategic Program and Investment Framework, FDRE, Ministry of Agriculture, 2013
[11] Project Catalyst, Scaling up Climate Finance: Finance Briefing Paper (September 2009) at 4, available at www.projectcatalyst.info.
[12] Harvard Project on International Climate Agreements, Climate Finance: Key Concepts and Ways Forward, by richard b. stewart, benedict kingsbury, and bryce rudyk, 2009

from auctions of domestic emission allowances (US$ 5.3–20bn), and the remainder through public fiscal revenues (US $ 33–23 bn)

Global

As indicated in the figures 3.1.1 and 3.1.2 below, the Climate Fund Updates (CFU)[13] indicates that global pledges to Climate Finance to date amounts to circa US$ 35 Billion, of which circa US$ 19 Billion has been deposited and of which US$ 14 Billion has been approved for disbursements.

Figure 3.1.1

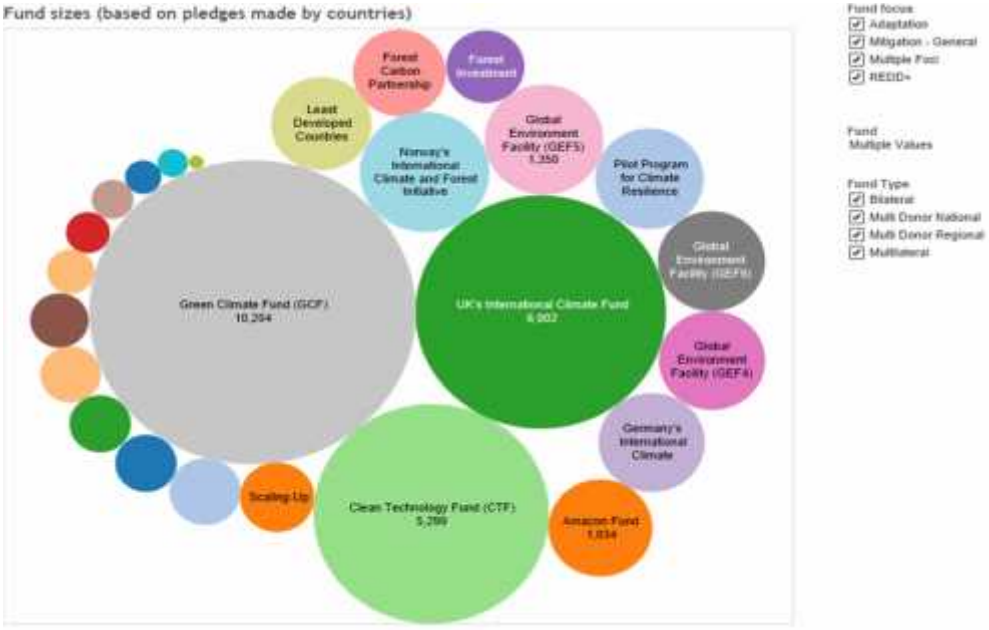
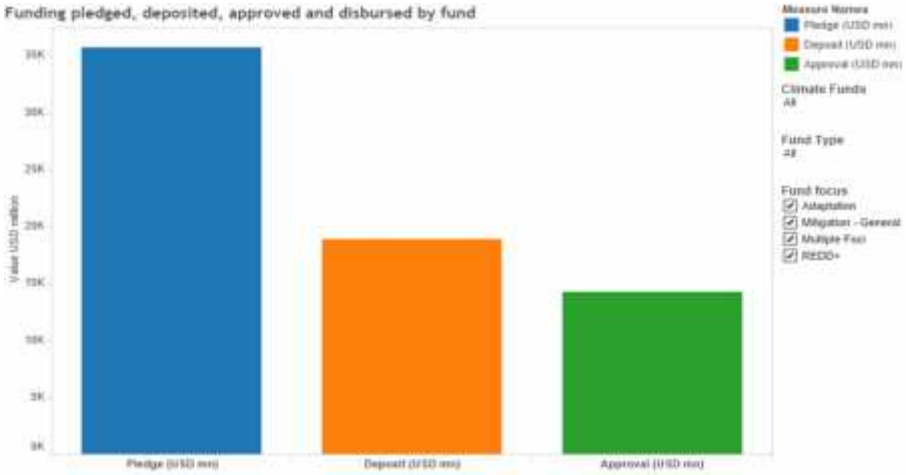


Figure 3.1.2



Of the amount approved for disbursement, circa US$ 3.7B has been disbursed.

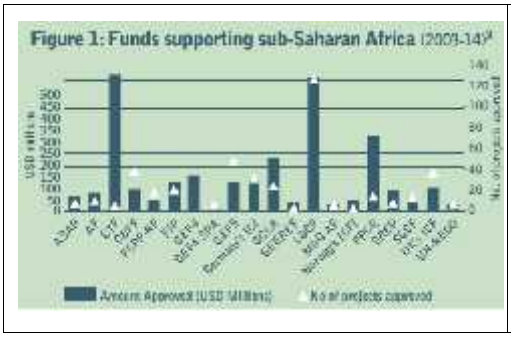
[13] Climatefundsupdate.org

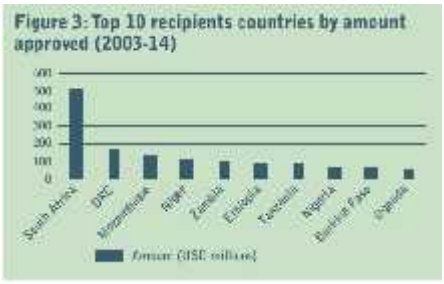
Sub Saharan Africa

Sub-Saharan Africa is both the region least responsible for global climate change and most vulnerable to its impacts. A multitude of actors are involved in directing climate finance to the region, both to support low carbon development and to help countries adapt to severe impacts that are already being felt. The World Bank administered Clean Technology Fund (CTF) and the Least Developed Countries Fund (LDCF) are the biggest funding providers in the region. CFU data indicates that US$ 2.309 billion has been approved for 453 projects and programs throughout Sub-Saharan Africa since 2003, including USD 600 million newly approved over the last year (representing 16% of Global Approvals).

The table 3.1.1 below shows the Funds that support climate financing for SSA. As indicated in the table, only 45% of approved funding (US$ 1.03 million) is delivered for adaptation measures, substantially less than the US$ 18 billion per year that is estimated to be required in the region until 2050 for adaptation alone[14].

Table 3.1.1





A large share of climate finance for SSA has been directed to South Africa, which has received over 25% percent of funding approved since 2003 (see table 3.1.1, figure 3). Much of the finance South Africa received has supported the CTF Eskom US$ 350 million renewable energy program, which seeks to promote the development of large-scale concentrated solar power and wind energy.

The largest single adaptation project in SSA is the USD 63 million Community Action Project for Climate Resilience in Niger, approved in 2011. The primary aim of this project is to increase the food security of rural communities by improving the resilience of their agricultural systems to climate variability and change

Although each of the forty-nine countries in SSA except for Somalia and Swaziland have received some funding, outside of a few countries approved finance has been spread quite thinly. While most funding is at the country level, USD 50.51 million has been approved for 11 regional projects. The amount approved for the largest 25 projects range from USD 24.5 to 350 million, with the remaining projects at a much smaller scale with an average of USD 3.81 million. These

[14] http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9341.pdf

small projects are unlikely to achieve impact at scale without significant additional and integrated spending.

As motivated only a small amount of global climate finance has reached Sub-Saharan African countries, particularly the poorest countries in the region. One of the main barriers to investment is the transaction costs of small scale projects that are often required in the poorest areas, and the difficulty of designing and implementing such programs in ways that are financially viable.

3.1.4. Accounting for Financing Commitments[15]

There are numerous problems, both for public and private financing, in defining commitments ex ante and accounting ex post for resources transferred and reductions achieved.

Accounting for public climate finance commitments

Public sources of financing will take a variety of forms in addition to direct bilateral or multilateral ODA transfers. These include concessional debt, loan guarantees, and technology transfer arrangements. While there will be substantial conditionality attached to all forms of transfers, it will remain difficult to determine the relationship between the support provided and the expected or actual level of reductions achieved. It will be essential to put in place robust monitoring, reporting, and verification (MRV) arrangements, *applicable to both donors and recipients*, suitably adapted to the different forms of financing provided. Moreover, supporting measures by host developing countries, including public infrastructure expenditures and regulatory incentives for technology deployment like feed-in tariffs and renewable portfolio standards will also be needed to support the transition to a low-carbon economy and must eventually be included in the analysis.

Accounting for private climate finance commitments

There are also significant problems in accounting for private resource transfers and mitigation performance, especially ex ante if the award of offset credits is subject to adequate MRV, emissions reductions achieved can be estimated ex post. But ex ante estimations will be far more difficult because the dollar amount invested by the private sector to achieve a particular level of reductions will vary among domestic ETS offset credit programs and over time. These variables will in part be driven by different domestic regulatory conditions that help determine the price that offset credits command in domestic ETS compliance markets and the level of private investment that will be elicited. These include: the terms and conditions on which offset credits for developing country mitigation are recognized in domestic climate regulatory systems; the overall percentage of offset credits, relative to the aggregate emissions cap, that can be used by domestic sources in order to satisfy their regulatory obligations; the stringency of the domestic cap; and the terms of other countries' domestic ETS and offset credit programs. The levels of private investment and mitigation achieved will also be influenced by regulatory arrangements in

[15] Harvard Project on International Climate Agreements, Climate Finance: Key Concepts and Ways Forward, by richard b. stewart, benedict kingsbury, and bryce rudyk, 2009

developing countries for offset credit projects, as well as the extent of regulatory and other support for mitigation investment. Arrangements for leveraging, discussed below, will produce additional complexities and uncertainties. Arbitrage, institutional failure, and corruption must be anticipated. These challenges must be resolved to produce mechanisms for ex ante accounting that will reinforce the credibility of private finance commitments as a necessary part of the climate finance deal.

Notwithstanding, a significant advantage of a well-regulated system of private finance through credit offsets is that it can provide good ex post measures of the emissions reduction achieved.

3.1.5. Leveraging Financing to Maximize Impact[16]

The levels of public and private finance will fall short of those needed to meet climate protection goals. Limiting the gap requires that the available resources be used in the most efficient and effective way to maximize the reductions achieved, including through leveraging mechanisms to increase the level of emissions reductions achieved for a given amount of financing.

Leveraging Public Sources

In the case of public financing arrangements, leveraging can take a number of forms: low-interest loan guarantees or concessionary debt in which loans for low-carbon growth are given to developing countries below commercial rates; developed country funds could be used as collateral to secure developing country loans; investment insurance or export credit provided by domestic or international public agencies, to minimize risk for private investors in developing country mitigation projects; or arrangements to catalyze technology transfers, which may include domestic tax or fiscal incentives to developed country manufacturers/patent holders. These and other leveraging options can support and stimulate public mitigation finance by developing countries and private mitigation finance from both developed and developing countries.

Leveraging Private Sources

There are a number of options for leveraging private financing. For example, leverage may be achieved through *intermediary carbon banks* that would purchase reductions at prices *approximating* the marginal costs of producing them, for example by using reverse auctions. The banks would then sell the reductions at the market price that credit offsets command in developed countries, with the difference used to purchase additional reductions for the benefit of the climate system.

Another leveraging technique, is credit discounting. For example, 1.25 offset credits could be surrendered to cover 1 unit of domestic emissions by regulated sources. Further still, offset credit markets could segmented, with different credit offset programs and markets for different categories of mitigation actions, classified based on their position on a marginal mitigation cost curve. For example, there could be one market for emissions reductions through energy

[16]Harvard Project on International Climate Agreements, Climate Finance: Key Concepts and Ways Forward, by richard b. stewart, benedict kingsbury, and bryce rudyk, 2009

efficiency investments that typically achieve reductions at low or negative cost; a second market for land use, agriculture, and forestry mitigation projects characterized by moderate costs; and a third for renewable and other alternative energy projects with relatively high costs. By segmenting the market, more reductions can be achieved with a given amount of investment than through a single market where credits from low and medium-cost mitigation activities command the same price as higher cost projects, with the price determined by the market-clearing marginal mitigation cost.

Supportive regulatory and other policies can stimulate higher levels of private mitigation investment. Furthermore, if developing countries contribute matching funds or emissions reductions undertakings in concert with financing commitments (public as well as private) from developed countries, additional reductions could be realized for the same developed country investment.

Addressing developing country concerns about leveraging

Developing countries will be unhappy with the elimination of 1-1 crediting in a single open credit market and the loss of accompanying economic rents. However, if developed countries commit to significantly higher levels of both private and public funding through credible arrangements, these losses can be more than offset by greater volumes of public and private development finance flowing to developing countries. Such a bargain could provide part of the basis for a comprehensive deal. The bargain must include a developing country role in the design and governance of offset credit market mechanisms, which are currently being established by developed countries unilaterally through domestic legislation and regulation.

Transnational credit offset arrangements are likely to emerge initially through bilateral or plurilateral negotiations between individual developed country jurisdictions and major developing countries. The problems concerning the relation between these new private financing arrangements and the CDM or its successor are thorny, but manageable. Eventually a more multilateral and more integrated approach for private finance should emerge that would then contribute to the development of a unified global carbon market; such a market will in turn enhance economic efficiency and climate protection.

3.1.6. Direct Access to Climate Finance

Direct access to climate finance, may help reduce the transaction costs associated with projects that presently involve a large number of intermediaries that require bottom-up approaches as opposed to top down approaches. Direct access, however, demands that national institutions have the capacity to meet fiduciary standards and manage funds well. Strengthening institutional capacity within governments and intermediaries to position same to attract direct climate funding will be crucially important to build resilience to the impacts of climate change over the longer term.

The more bottom-up approach to mitigation will demand substantial decentralization of decision-making regarding the sourcing, allocation, and use of funds, which can no longer be simply dictated though top-down donor conditions. These steps will help give developing countries a sense of ownership in mitigation programs and both assure them that their development goals will be advanced and further their engagement. At the same time, new forms of conditionality, consistent with this changed approach, will need to be developed to ensure that resources transferred achieve mitigation goals. In addition, new forms of recipient as well as donor accountability, including financial accounting, MRV arrangements to assure mitigation performance, and potentially revised cost-sharing formulas, as well as in-country public participation and good governance, will be required to match the greater decisional role, discretion, and responsibility afforded developing countries.

3.1.7. Targeting the Sectors and People Most in Need

As motivated earlier, because of cost of transaction, climate finance flows in SSA turn to flow towards large scale projects at the expense of small scale projects that often benefit those in need.

It is an immense challenge to design and implement programs in ways that are financially viable, and can also be scaled-up and replicated. This challenge is further compounded by the poor investment climate in many African countries; the weak capacity of government institutions to manage finance, political instability and governance problems. However, some efforts have been made to help direct investment to these smaller scale projects. For example, the Economic Community of West African States (ECOWAS) established a fund to purchase carbon credits upfront to provide start-up capital for domestic small and medium sized enterprises and NGOs. The Central African States Development Bank (BDEAC) has developed similar instruments to facilitate access for Clean Development Mechanism (CDM) project developers to access funding. Nevertheless, even with increased private sector involvement in small -scale projects in SSA, a large and sustained contribution of public sector grant financing in the region will be essential. This is particularly true for climate action needs that will not provide a financial return on investment, but instead produce significant intangible gains in the form of environmental, developmental and social, including gender, co-benefits.[17]

[17] Overseas Development Institute Climate Finance Policy Brief, 2011.

4. General Overview of Access to Finance for the Private Sector

Private Sector Projects or Businesses typically go through a life cycle and their stage of development often determines the availability and type of funding that they can access. The proceeding sections highlights the typical stages that businesses and or projects go through in their life cycle, the sources and characteristics of funding available.

4.1. Business Life Cycle or Project Development Approach to Finance

As shown in figures 4.1.1a and 4.1.1b below, businesses or projects have a life cycle and the challenges or constraints faced, depending on the life cycle stage are often similar, albeit some differences depending on industry or sector peculiar situations.

Figure 4.1.1a

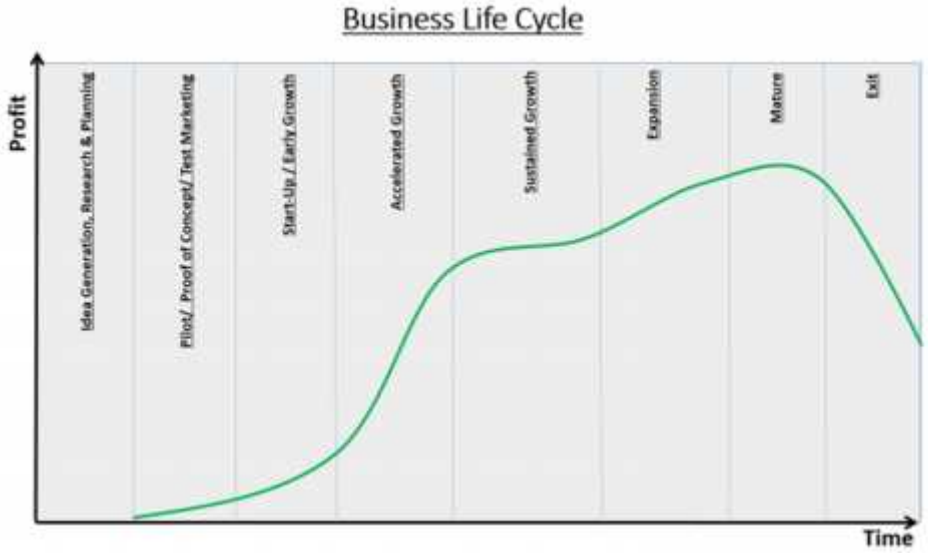
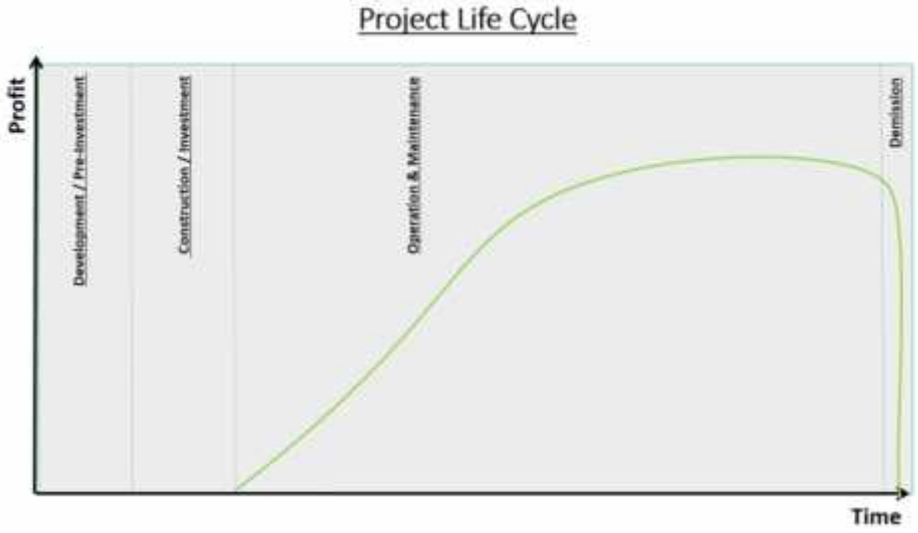


Figure 4.1.1b



Most private sector businesses or projects start with the identification of an opportunity to solve a problem, fill a gap, or create new market spaces to meet known and unknown needs or demand for profit. Idea generation per how to explore the opportunity follows, leading, to research & development or pre-investment activities.

Research & Development (R&D) / Pre-Investment

R&D activities such as exploration, feasibility studies, and project design; planning and environmental studies occurs typically when a business or project is not legally established and motivating or validating the viability of the business or project is a major challenge. Cost is often incurred at this stage with no associated revenue as demand for product or service is yet to be demonstrated; thus financing to cover the cost of development is most acute.

Prove of Concept

R&D is often followed by prove of concept - test marketing or piloting. Revenue may or may not be generated and if generated is often not adequate to cover associated cost. Financing to cover the cost of piloting remains a major constraint for the private sector in this stage.

Start-up/ Construction

The Start-up or construction stage requires significant investments and more so in businesses or projects that require capital expenditure: - acquisition of land, equipment, construction etc. At this stage, the business or project may have been registered, product or services may be on offering and there are often identified customers. Typical challenges associated with this stage include, under estimation of funding needs, overestimation of time to market and cash flow management. Access to finance remains a major constraint as a result of lack of track record and accurate management records, weak governance, management expertise, availability of appropriate finance and lack of collaterals.

Growth / Operational

Early growth & growth stage in the case of businesses or the operational stage in the case of projects is characterized by increasing customers and revenue. Challenges center on demand for time, money and experienced human resource to sustain and manage growth as well as maintain facilities. Finance is often available to enterprises/projects in this stage as the enterprise/project may have had a few years of operation under its belt; however lack of collateral remains a major constraint to accessing finance during the growth/operational stage of the life cycle.

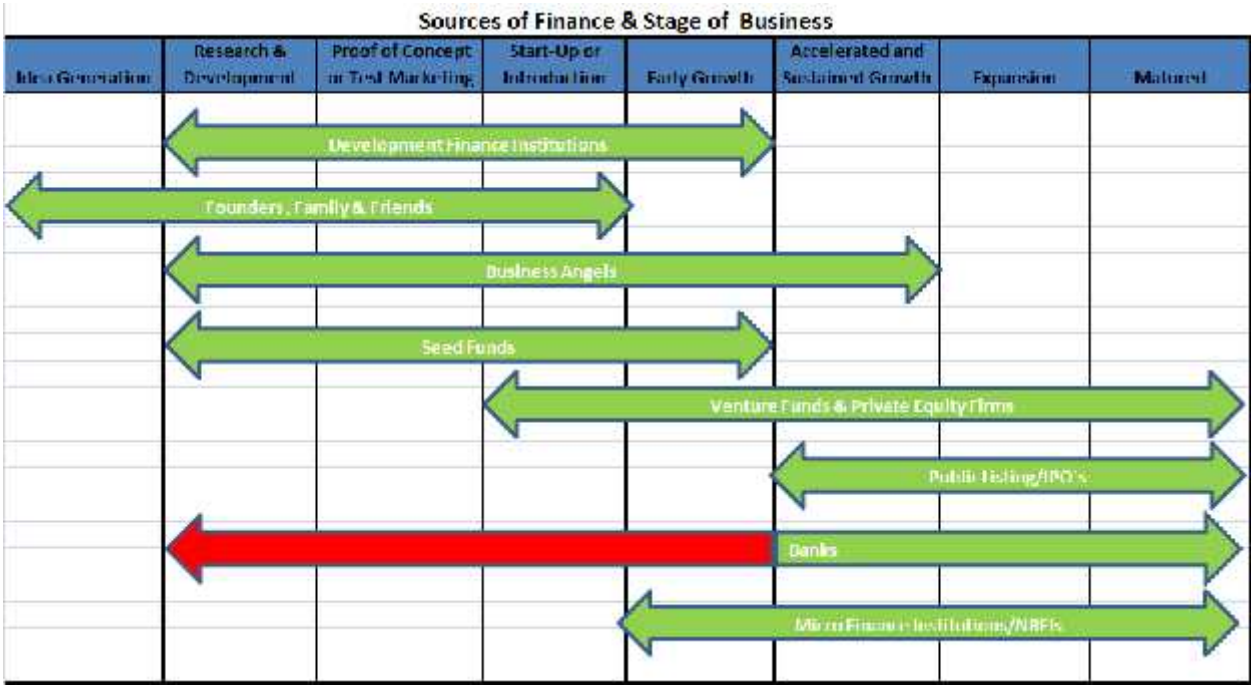
Expansion

Expansion in the life of a business or project involves growth into new markets and or distribution channels in order to gain new market share and find new revenue and profit channels. Challenges entail planning and research of new markets, creating synergies to complement existing experience and capabilities. Access to appropriate funding for R&D and addition of capacity is often a challenge at this stage.

4.2. Source and Characteristics of Funding for the Private Sector per their Life Cycle Development Stage.

The types and sources of funding typically available to private sector businesses depends on their stage of development. Figure 4.2 below describes the most common sources of funding for businesses viz-a-vis the stage of their development.

Figure 4.2



Banks: - Banks are generally the most widely available source of funding for businesses and profess to provide funding, mostly debt, for businesses in the whole spectrum of the business development life cycle. However, due to risk reward expectations, banks generally focus on businesses in the Sustainable Growth to Matured Stages of their business life cycle and will seldom fund businesses in the Research & Development to the Start-up and Early Growth stages as shown by the red arrow in figure 4.2 above. Banks are typically characterized by the following:

- Often driven by volume and inflexible with a standardized mode of service delivery
- Have a transactional approach to funding
- Often driven by short term goals
- Sells products and not solutions – you either "fit" or "don't fit" the product offered
- Short to medium term funding horizon: 1- 36 months
- Often requires 120%+ collateral
- No or insignificant moratoriums

Micro Finance Institutions: - Micro Finance Institutions are widely available and typically provide debt financing for businesses in the Early Growth to Matured Stage of the business life cycle and are characterized as follows:

- Often driven by volume
- Often driven by short term goals
- Offers small (micro) short term loans: up to $10K and 1-6 months tenure
- Often charge high interest rates and make clients perpetually dependent on them with little growth potential
- Sometimes require considerable collateral

NBFIs: - Non-Banking Financial Institutions typically provide debt and other financial instruments such as commercial papers, debentures and debt financing for business in the Early Growth to Matured Stage of the business life cycle and are characterized as follows:

- Often driven by volume
- Often driven by short term goals – bridge finance
- Offers small to large size loans with 1-6 months tenure
- Very high interest rates
- Often require collateral

Venture Capital/Private Equity Firms – Private Equity and Venture Capital Firms will typically fund businesses from the Start-up to the Matured stage of the business life cycle. They typically have the following characteristics:

- Driven by size of deal or funding
- Longer investment horizon
- Relationship and hands-on developmental approach
- Takes on more risk and expects high returns.
- More flexible financing mix – equity, debt, hybrid securities

As motivated above, though the life cycle stage of a business highly determines its likely sources of funding, appropriateness of funding also depends on various variables such as size of enterprise, funding needs, management experience, collateral availability, operational strategy of financier, type of financial instruments offered by the financier and industry or sector focus of the financier.

4.3. Life Cycle Stage & Climate Finance Perspective

4.3.1. Viability Gaps

Notwithstanding the cost associated with businesses in the Start-up or Investment/Construction stages; most climate-friendly projects or businesses seeking to go "Green" have high additional investment costs at the Start-up or Construction stage. To capture this investment barrier, the term '*Incremental investment costs*' is used: - the difference between the investment costs of a

'Green' project, and the investment costs of a "BAU" project, i.e. between a low-carbon and a comparable high-carbon project. For example, in adaptation projects' incremental investment costs include all investment costs associated with adapting to climate change that are additional to a scenario without manmade climate change.

The flip side of the costs are revenues, which are typically earned through selling a product or delivery a service to the market and must usually equal or exceed total costs in order to make a project worthwhile from investors or the private sectors perspective. In the case of adaptation and energy efficiency projects, the avoided costs of climate impacts or of buying fuels can be considered as "revenues". Where revenues in a particular market and avoided costs are insufficient to recover total project cost or grant a positive NPV[18] to a climate project or business enterprise, as in the case of an expensive renewable energy technology, for example, there is said to be a 'viability gap'. This gap is the difference between the total costs of a project and the total revenues it can generate.

In addition to addressing the constraints to access to finance for start-up businesses or projects, in the case of climate businesses or projects, viability gaps are a key impediment to profit-oriented public or private investment and may be closed via intervention either on the cost or revenue side in climate finance interventions.

4.3.2. Enabling Ecosystem

The life cycle stage perspective is helpful to identifying the viability gap of individual climate finance projects or enterprises but it does not capture the full costs of climate policy for the whole ecosystem. The full incremental cost of climate change mitigation or adaptation consists not only of the viability gap of a project or enterprise but also of broader public expenditures to create and enabling ecosystem for climate projects or enterprises, which are defined as public expenditures that meet sector, system or economy-wide climate finance needs but are not part of the investment costs of individual projects and do not constitute revenues needed to pay back investment costs. This means that climate finance interventions need to consider both the life cycle of enterprise or projects and a broader whole-economy or ecosystem perspective when designing interventions to address low-carbon and climate-resilient investments.

4.3.3. Scaling up Climate Finance

Entry points to consider for interventions to leverage on private sources of finance to scale up climate finance are:

- ✓ Addressing the associated life cycle constraints faced by private enterprises or projects that hinders their ability to access private sector finance.

[18] Net Present Value of Discounted Cash Flows of a Project in a given period.

- ✓ Targeting viability gaps by increasing project revenues, e.g. through carbon credits, feed-in tariffs, or subsidized power purchase agreements etc
- ✓ Targeting viability gaps by reducing project costs through different measures. Traditional instruments include:
    - o Investment grants to reduce private investment needs,
    - o Concessional loans to reduce the cost of capital, and
    - o Tax reductions or rebates
    - o R&D or project preparation and planning facilities to lower pre-investment costs
    - o Utilizing risk mitigation instruments (guarantees, risk-sharing facilities, etc).
- ✓ Building an Enabling Ecosystem; traditional initiatives include
    - o Building a practical MRV system and developing a carbon credit market
    - o Building public infrastructure, say a treatment plant for a cluster of enterprises
    - o Capacity building for closing knowledge gaps;
    - o Developing, implementing and monitoring climate policies to remove technical, legal and administrative barriers to investment;
    - o Improving the general investment climate for the private sector.

5. Ethiopia's Financial Sector

5.1. Legal and Policy Environment of the Financial Sector in Ethiopia

The legal and regulatory framework affecting financial institutions impact the ability of banks and MFIs to lend. Banks and MFIs report facing weak liquidity positions due to credit limits for SMEs and micro enterprise loans, not being able to go beyond 10 percent of their capital for microfinances institutions and 25 percent for banks.

Financial institutions are required to set their lending portfolio for monitoring purpose by the NBE. These lending restrictions were imposed on private banks and then replaced by an NBE directive requiring commercial private banks to allocate 27 percent of their loan disbursements to purchase fixed and low-interest bearing NBE Bills. According to private commercial banks, this directive has had a negative impact on their liquidity and lending capacity and they are therefore not able to lend as much as they want.

In a constrained liquidity environment banks are likely to favor existing, established clients when allocating loans as opposed to newer, riskier start-ups. Although a temporary solution was provided by NBE by reducing the reserve and liquidity requirements on commercial banks, lowering the reserve requirement down from 10 to 5 percent and the liquidity requirement from 25 to 20 percent, the liquidity problem of the private banks appears to still be an issue. Government financial programs

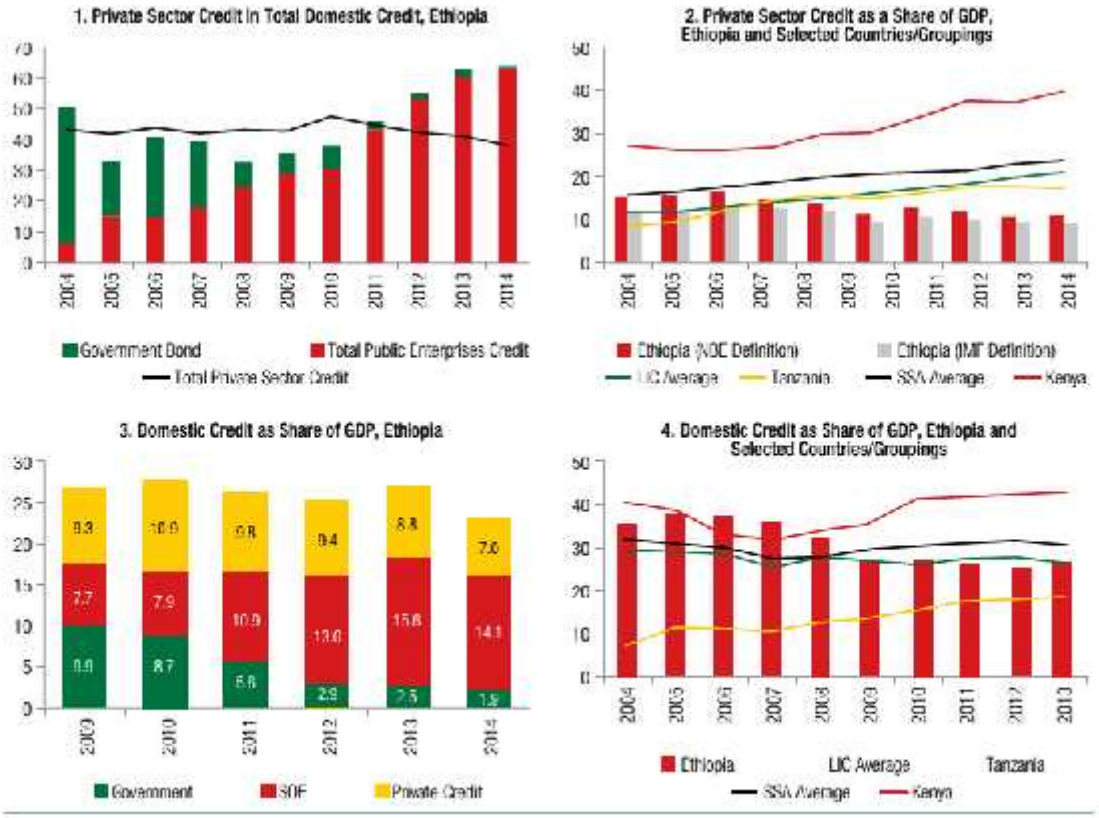
The Financial legal framework in Ethiopia does not cater for alternative source of funding for enterprises, thus debt financing is the most available

5.2. Overview of the Ethiopian Financial Sector

As of 2012/13 Ethiopia has 19 commercial banks and 15 insurance companies from 17 and 14 respectively in 2011/12. The fact that banks are still required to allocate 27 % of their loan portfolio in central bank bonds has been a constraint on the private commercial banks liquidity and is one of the reasons limiting credit access to the private sector.

The share of private sector credit of the total banking sector credit has consistently been declining from 66.5 percent in 2007/08 to 40.1 percent in 2013/14. Similarly, the ratio of private sector credit to GDP declined from 15.4 percent in 2003/04 to 10.9 percent in 2013/14, and remained below the SSA averages for the period reviewed (Figures below.)

Overall, credit as share of GDP is on a downward trend and below the SSA average since 2008



Source: World Bank staff computation, based on: 3.1–3.2: NBE and FinStat (2015), and 3.3–3.4: NBE and WDI.

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Interest Rates

The central bank's policy on interest rate is that it sets the minimum (floor) bank deposit rate, currently at 5 %, but the banks are free to pay above the minimum and to set their own lending rates. While the minimum bank saving rate was controlled at 5 %, average saving rate was 5.4 % and lending rate at 11.88 % in 2013/14. Real saving rates remained negative as the inflation rate is still higher than the nominal interest rate. The relatively insensitive nature of savers to interest rate, due to the absence of alternative financial instruments, has allowed the banks to hover around the minimum deposit rate. The banking sector's total assets in Ethiopia increased by 13.3 percent over the one-year period up to June 2014, but financial intermediation remains low. Three public banks constitute 77 percent of total assets of the banking sector.4 Within this group are the Commercial Bank of Ethiopia (CBE) and the Development Bank of Ethiopia (DBE). CBE holds 80 percent of the total outstanding loans and investment used to finance public investments and DBE is a large holder of treasury bills. Consequently, financial intermediation remains low and on a declining trend.

Strength of the Banking Sector.

On average, banks appear to be well capitalized and profitable. Compared with 2013, total capital of the banking industry increased by 13.2 percent and reached Birr 26.4 billion by the end of June 2014. As a result, the system-wide capital adequacy ratio increased to 17.2 percent at the end of March 2014 (it was 14.6 percent at the end of March 2013) and remains well above the 8

percent minimum requirement. Though banks' operating costs appear to have increased, the profitability of the banking sector remains high with return on assets (ROA) and return on equity (ROE) at 3.1 and 44.6 percent, respectively (as of end March 2014). Both are well above the SSA average of 2 percent for ROA and 17 percent for ROE at end 2013.

Asset quality has also improved over time, with nonperforming loans at less than 3 percent of banks' total loan portfolio at the end of March 2014. The liquidity situation however is showing some signals of stress in the system: at the end of March 2014, the system-wide liquidity ratio (liquid assets to total assets) was only slightly above the 15 percent minimum requirement.

Capital Markets

Capital markets in Ethiopia mainly comprise treasury bills and Government bonds. Treasury bills are transacted on a weekly basis while Government bonds are occasionally issued. Maturities of T-Bills range from 28, 91, 182 and 364 days of which 91 days and 364 days are the most demanded terms. In December 2014, the country joined Ghana, Kenya, Senegal, and Ivory Coast in issuing an euro bond that raised US$1 billion to fund infrastructure-related projects for the electricity, railway, and sugar industry sectors.

Access to Finance

The banking sector and microfinance institutions (MFIs) are expanding in their structure of liabilities and assets, but access to finance remains a challenge. 7 Commercial banks have branched out in previously unbanked areas and the number of bank branches went from 390 in 2009 to 2,208 in 2014. As a result, the ratio of total bank branches to total population improved to 39,834 from 49,675 over the past year, reflecting a significant annual improvement in financial service outreach.

As of June 2014, the banking system's total net deposits showed a year-on-year increase of 23.7 percent. Likewise, MFIs mobilized a total saving deposit of Birr 11.8 billion, about 54.8 percent higher compared to the same period of the previous year. The outstanding credit of the MFIs scaled up by 31.9 percent on annual bases and reached Birr 16.9 billion. As a result, their total assets increased 38.6 percent on annual bases and stood at Birr 24.5 billion by the end of June 2014. Access to finance for however, remains a critical constraint: only 1.9 percent of small firms have a loan or line of credit. This rate is lower than among micro, medium, and large firms (6.0, 20.5, and 35.5 percent, respectively) and corroborates with assertions that small firms struggle the most in obtaining access to finance since MFIs cater to micro-sized firms, and commercial bank clientele are predominantly medium and large firms.

The financial sector, mainly banking and insurance services have been broadly stable and growing in terms of expanding its services. The sector continues to tap into new opportunities for

mobilizing savings through establishment of new banks and expanding their branch networks as well as introducing new financial instruments.[19]

5.2.1. Sources and Types of Funding in Ethiopia

Financial intermediation is a driving force for economic development. Bank debt financing remain the main source of funding for Ethiopian private sector firms -an expansion in credit to the private sector enables firms to invest in productive capacity, thereby laying the foundation for a sustainable growth path. However Ethiopia is falling behind its peers in financial intermediation. As indicated earlier the ratio of private sector credit to GDP declined from 15.4 percent in 2003/04 to 10.9 percent in 2013/14, and remained below the SSA averages for the period reviewed. In addition, the decline in Ethiopia comes at the background of a global trend of increasing private sector credit.

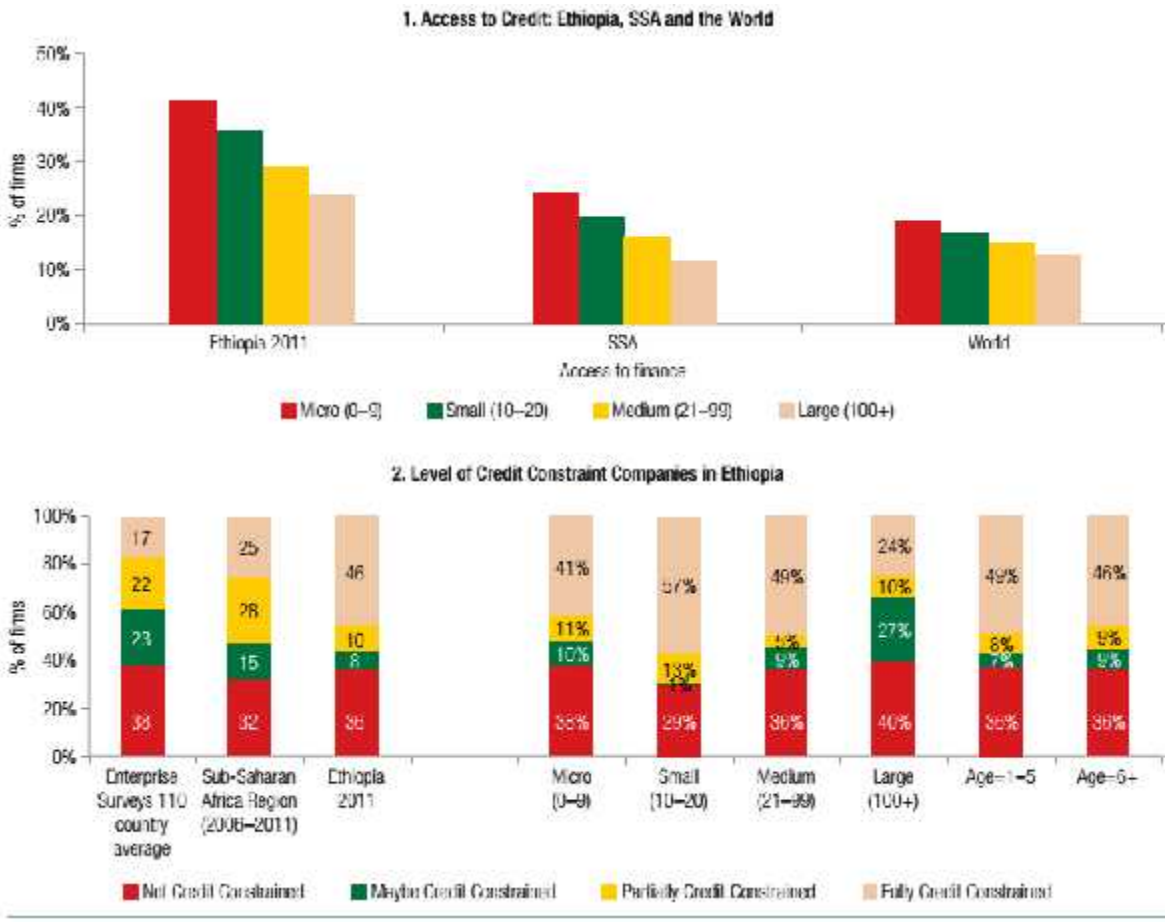
According to the Doing Business Report 2015, Ethiopia ranks 165 out of 189 in the ease of getting credit compared to the SSA average ranking of 122 and well-performing peers such as Rwanda which ranks 4 of 189 economies (World Bank, 2015b). Firms that are fully credit constrained exhibit poorer performance and productivity.

Firms in Ethiopia are more likely to be fully credit constrained than global comparators, including SSA countries. Nearly half of firms in Ethiopia are fully credit constrained. Fully credit constrained firms are those without external financing and were either rejected for a loan or did not apply even though they needed additional capital. For firms, being credit constrained means poorer performance and less productivity.

In Ethiopia, a credit constrained firm has 15 percentage points lower sales growth, 5 percentage points lower employment growth, and 11 percentage points lower labor productivity growth than firms who are not credit constrained. Investment decisions of manufacturing firms in Ethiopia are heavily dependent on cash flows.

Access to finance remains a top obstacle for enterprises in Ethiopia. As shown in the tables below firms consistently identify access to finance as one of the top five obstacles to doing business in Ethiopia, rated as the third most binding constraint in the Global Competiveness Index 2015 and number one in the Enterprise Survey 2011.

[19] UNDP Country Economic Brief Analysis Issue No. 1/Feb.2014

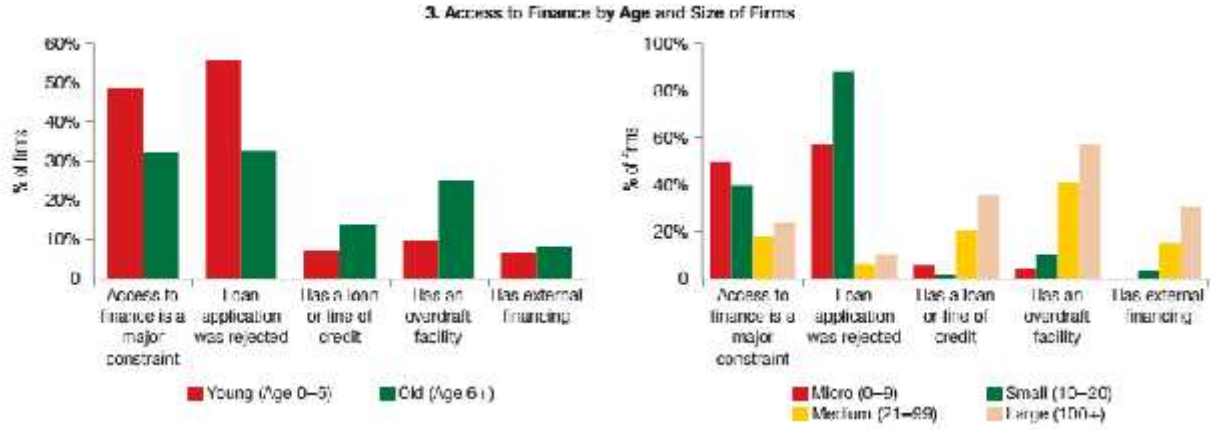


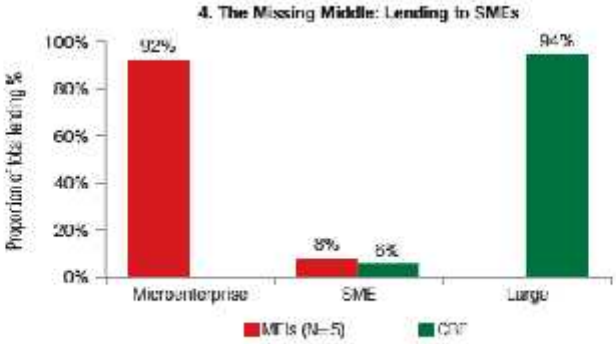
According to the Enterprise Survey, this is perceived as the main business environment constraint by micro (41 percent), small (36 percent), and medium (29 percent) enterprises in Ethiopia, compared to a SSA average of 24, 20, and 16 percent, respectively

The same data indicates that almost 93 percent of small enterprises and over 95 percent of medium enterprises have either a checking or a savings account (a percentage higher than the respective SSA averages) but only 3 percent of small enterprises and 23 percent of medium have a loan or a line of credit.

Young and small firms appear to face more serious financial constraints relative to those that are larger and more established. Across a range of financial indicators created using the Ethiopia Enterprise Survey (2011), young and small firms are the most likely to report that access to finance is a major constraint to their business operations and at rates higher than other well developed African countries. In South Africa in 2010, for instance, only 10.4 percent of SMEs rated access to finance as a major constraint. In contrast, in Ethiopia nearly half of microenterprises, 40 percent of small firms, and 18.5 percent of medium firms reported access to finance to be a major constraint to daily operations.

Overall, data indicates the existence of a missing middle phenomenon in terms of financial services catering to small firms. Young and smaller firms are much more likely to be rejected for a loan or a line of credit than firms who are more established or larger (see below)





Sources: (1) and (3) based on Enterprise Survey (2011), (2) and (4) based on World Bank (2014d).

Moreover, despite confirming their need for improved access to finance, SMEs are discouraged from applying for loans due to excessively high collateral requirements. Only 1.9 percent of small firms have a loan or line of credit. This rate is much lower than that of micro, medium, and large firms (6.0, 20.5, and 35.5 percent, respectively). Further illustrating the existence of a missing middle phenomenon, in Ethiopia, small-sized firms (10–20 employees) are the most credit constrained of all firm segments (57 percent), more than micro medium, or large firms at 41,49, and 24 percent, respectively. The missing middle phenomenon is a common feature to many developing countries that have a large number of microenterprises and some large firms, but far fewer small and medium enterprises.

High collateral requirements are a binding constraint for smaller firms since the most common type of collateral used are land and buildings or personal assets (see below).

	Micro (0–9)	Small (10–20)	Medium (21–99)	Large (100+)
Land and Buildings	69.6	86.1	81.9	85.4
Equipment	2.1	2.5	33.0	84.9
Accounts	2.1	2.5	4.8	24.5
Personal Assets	26.2	36.8	27.0	22.0
Other	4.2	0.0	0.0	14.3

As elsewhere in developing economies, Ethiopian banks prefer immovable collateral such as land rather than movable assets such as machinery. Large firms are the only ones who commonly

can use equipment as collateral. The use of accounts as collateral is also rare, even for large firms; less than a quarter of large firms use this as a form of collateral. The average value of collateral needed for loans in Ethiopia is also very high compared to other regions of the world as well as to other developed economies in Africa. On average, Ethiopian firms require 234 percent of the loan amount for collateral, compared to 134.3 percent in Eastern Europe and Central Asia. In well-developed African countries, collateral requirements are also much lower than in Ethiopia: 120.8 percent in Kenya (2007), and 103.6 percent in South Africa (2007).

A recent ad hoc survey of the supply side of MSME financing in Ethiopia confirms that small and medium enterprises are being underserved compared to micro and large firms. MFIs primarily cater to micro firms and bank clientele are primarily large firms. The five MFIs who reported lending figures disaggregated by client size focus their lending on microenterprises. 92 percent of their total loans are disbursed to microenterprises while only 8 percent are issued to SMEs. Among banks, only the CBE reported disaggregated lending by client size. The CBE tends to focus on large enterprises and provides lending to the SME sector comprising almost 6 percent of the bank's total disbursements. The majority of financial institutions believe that prospects for the SME market are good and that the SME market size is large. The small enterprise segment is also identified as the most promising segment for growth by both commercial banks and MFIs, however SME lending is limited as MFI deposits and loan portfolios are comprised mainly by microenterprises. The same is true for commercial banks where deposits and loan portfolios typically comprise less than 10 percent of MFIs.

Financial institutions in Ethiopia lack a commonly agreed definition of MSMEs which leads to poor market segmentation, along with a lack of in-depth customer knowledge and proper business strategy. While the majority of MFIs use the SME definition that is laid out in the Government's National MSME Development Strategy (Table below)

Level of the enterprise	Sector	Number of Employees	Total assets (Birr)
Micro enterprise	Industry	<= 5	Less than or equal to 100,000 (US$ 6,000 or EUR 4,500)
	Service	<= 5	Less than or equal to 50,000 (US$ 3,000 or EUR 2,200)
Small enterprises	Industry	From 6–30	Less than or equal to 1.5 million (US$ 90,000 or EUR 70,000)
	Service	From 6–30	Less than or equal to 500,000 (US$ 30,000 or EUR 23,000)

Source: National MSE Strategy of Ethiopia (2011).

Commercial banks do not seem to uniformly distinguish among small, medium, and large enterprise. Typically banks define SMEs according to the annual turnover of the business, loan size, and number of employees and/or revenues generated by the financial institution. All MFIs besides one uniformly use the number of employees-criteria. Most MFIs also categorize micro and small enterprise in term of turnover and loan size[20]

[20] World Bank Group: 4th Ethiopia Economic Update Overcoming constraints in the manufacturing sector July 8, 2015

6. Financial Intermediary Selection

For each strategic option under the CRGE Private Sector Strategy, the CRGE Facility Secretariat is expected to partner with FIs as conduits to finance private sector "greening". In selecting intermediaries the "appropriateness" of the FI must be taken into consideration to ensure a strategic fit.

The table below is a Macro level matrix per the framework on which the CRGE Facility should use to select "appropriateness" of financial intermediaries for each strategic option.

	CRGE Fund								
Portfolio Allocation	Micro Enterprises			SME			Large Enterprises		
Stage of Business	Idea to Start UP	Early Growth to Accelerated Growth	Expansion to Matured	Idea to Start UP	Early Growth to Accelerated Growth	Expansion to Matured	Idea to Start UP	Early Growth to Accelerated Growth	Expansion to Matured
Financial Intermediaries	MFIs, NDFIs, and Micro Finance Banks			Banks, SME Focused VCs & PEs			Banks, VCs and PEs		
Appropriate Instruments	Debt			Debt, Equity and Quasi Equity			Debt and Equity		
Interventions	Grants and Portfolio Guarantees			Grants, Equity and Portfolio Guarantees			Grants		

At the Micro level, in selecting "appropriate" financial intermediaries, the CRGE Facility as a guiding principle should:

- Assess the financing portfolio focus of the intermediary per life cycle stage and size of businesses in its investment portfolio.
- Evaluate the private sector industry category focus of the intermediary
- Assess the intermediaries' guidelines or risk management practices for extending finance to the private sector to ensure that they are in-line with best practices.
- Assess the deal origination practices of the said intermediary and financial instruments typically used.

The following must also be assessed to determine which financial intermediaries that funds can appropriately be channeled through for the private sector:

- Resources – Identify and appraise the financial intermediaries' financial strength and structures in place to ensure business continuity
- Capabilities - Identify and appraising the financial intermediaries' financial performance as compared to industry standards as well as its human resource capabilities per climate financing and or niche specialist financing.
- Experience – Evaluating the financial intermediaries experience with managing earmarked funds.

6.1.1. Highlights of Intermediaries in Ethiopia.

Development Bank of Ethiopia

DBE is a specialized financial institution established to promote Ethiopia's national development agenda through development finance and close technical support to viable projects from the priority areas of the government by mobilizing fund from domestic and foreign sources while

ensuring its sustainability. Its key mandate is to fund investment credit to viable business by mobilizing resources internally and externally.

DBE is a matured, stable, well performing bank as compared to Ethiopian industry standards. DBE is a well-resourced state owned financial institution with current capitalization of 3 Billion ETB, of which 1.8 Billion ETB is paid up capital.

The DBE provides loan services, counselling and technical services to clients. The focus sectors of DBE are:

- Export orientated and export quality products
- Agro-processing projects
- Manufacturing projects
- Inputs-supplying projects to the priority areas

DBE prefers to fund early growth to expansion stage enterprises in the focused areas mentioned above. The bank prefers to work with big projects that have impact on the economy. (Single exposure limit of DBE is 25% of capacity). Loans for less than 15 million Birr are typically originated and serviced through regional branches of DBE all over Ethiopia.

DBE provides short term, medium term and long term (up to 15 years) loan facilities, with an average tenure of 6 years. Moratoriums offered by DBE may go up to a maximum of 3 years. The borrower's level of contribution must be at least 30% of the total project costs, not including the already acquired assets of the company. Lending interest rates ranges from 6% to 10%.

The DBE has robust risk management policies and procedures in place for the management of the institution. The bank also has experience with the management of special purpose funds; examples are as indicated below:

Export Guarantee Fund

The Export Guarantee Fund was set-up to support exporting companies with the exception of those in the coffee sector. It was set-up and seeded by the GoE with USD 50M in 2007. The fund charges 2% to guarantee commercial bank lending to exporting companies. Under the management of DBE, as of 2015, the Guarantee Fund has grown to USD 83M.

Renewable Energy Market Development Fund (REMDF)

This Fund was set up with a USD 2M LOC at a cost of capital of circa 3% from the World Bank to DBE to lend to enterprises in the renewable energy sector. DBE follows its normal credit policy and processes to on-lend this facility to the private sector. Additionally, DBE lends portions of this facility to Microfinance Institutions to on-lend to the renewable energy sector. DBE's criteria for lending to MFI's is however different from that to private enterprises as MFIs do not have to post collateral to access the Fund and are offered preferential interest rates of circa 6%. (See *Appendix 8.1a* for DBEs required criteria for MFIs to access this facility).

Rural Electrification Fund (REF)

REF was set-up to support GoE's rural electrification program. REF provides loans to eligible viable projects sponsored by private non-governmental promoters. Promoters often provide off grid energy to rural communities from renewable sources.

DBE manages REF as Trust Agent for the MWIE. MWIE originates its own deals and conducts technical feasibility. Thereafter, MWIE sends screened pre-approved projects to DBE for financial appraisal to determine financial viability. If DBE deem the project to be viable, then it approves the project and signs a loan agreement with the promoter on behalf of MWIE and disburses same. REF is off the balance sheet of DBE thus DBE is not responsible for loan recovery. However, as part of its trust management agreement with REF, DBE follows up on REF beneficiaries on behalf of MWIE for recovery.

Grants, BDA, TA & Co-Financing

DBE has some experience with the management of Grants and TA programs. DBE provides counselling to enterprises but have no experience nor mandate to provide direct business development assistance and technical assistance.

DBE has co-financing experience with the likes of IFC, AfDB and EIB and is often the originator of the deal who approaches other BIs for co-funding opportunities.

Funds Mobilization

The DBE has the ability to mobilize scaled up, long term and flexible finance by (a) accessing national and international sources of public, private and carbon finance; (b) pooling/blending different sources of finance; (c) deploying a range of financial instruments, including long term loans & guarantees. It has the ability to finance inclusive investment in CRGE because it has a mandate to invest in sectors and products that are akin to CRGE investments and a mandate to lend to risky households and enterprises.

Equity Financing

DBE has no experience with Equity financing and is not open to equity financing because the credit policy of the bank does not address same.

Commercial Banks and MFIs

Commercial Bank of Ethiopia

CBE is the largest commercial bank in Ethiopia. As of June 2015, it had about 311 billion Birr in assets and held approximately 63.5% of deposits and about 38% of all bank loans in the country. The bank has over 900 branches positioned in the main cities and regional towns. The latter include 120 branches in the national capital Addis Ababa. It has years of experience in commercial banking with robust risk management policies and procedures in addition to a strong staff base of circa 22,000.

CBE credit facilities attract circa 8% interest rate with collateral requirement characteristics and life cycle focus similar to traditional banks. It offers debt instruments and some of its products include:

Overdraft- Availed to customers up to a maximum period of one year; can be renewed every year based on the request of customers.

Merchandise loan facility: - It is a short term credit facility extended to customers against merchandise or its documentary evidence. Like Railway Receipts, Warehouse Receipts, Airway Bills etc. This facility is extended to customers for a maximum period of one year and its maximum advance rate is 80% of the amount of the merchandise.

Pre-shipment Export Credit facility: - It is a short term loan extended to customers engaged in export business for purchase of raw material, processing, warehousing, packing, transporting the finished goods to shipment. The facility is granted to customers engaged in the export sector and able to present receipts of export proceeds at least USD 300,000 or equivalent currencies, or engaged in viable business for at least two years or offer collateral. Advances range from 70% to 90% depending on type of goods to be exported. The tenure of the facility is a maximum of one year.

Revolving Export Credit Facility: - it is an advance extended to exporters upon presentation of acceptable export documents except bill of loading. It is to solve working capital problems of exporters with continuous export transaction emanating from money tied up in goods in transit of shipment. Customers must submit export documents indicating the goods are in transit of shipment to port. Like irrevocable LC way bill, insurance contract, and other documents specified in LC. The maximum advance is up to 80% of the value of the document. The facility is availed to the maximum of one year.

Special Truck Loan Financing: - It is a term loan granted to coffee and /or sesame exporters mainly to overcome problems of transportation service prevailed in the export business. Eligible, exporters must have at least earned USD 4M or equivalent of other currencies during the last twelve months preceding the application date from the pertinent export business. The vehicle has to be a dry cargo truck and trailer with minimum loading capacity of 300 quintals.

Short term loans: - These are loans granted to customers to finance their working capital needs and /or other short term financial constraints. It is granted for a maximum period of three years and the repayment can be in lump sum or in periodic installments i.e. monthly, quarterly or semi-annually.

Medium and long term loans: - Extended to customers to partially finance acquisition or leasing of fixed business assets, establishment of new projects and expansion of an existing business. Tenure is 3 to 7 years for medium term and up to 15 years for long term loans.

Applicants for medium or long term loans must submit detailed project feasibility study or business plan and must contribute at least 30% of the total project cost.

Agricultural Input Loan: - Short term loan granted to customers for the purchase of fertilizers, improved seeds and agro-chemicals.

Agricultural Investment Loan: - It is a short to long term loan granted to customers engaged in commercial farms or agro-processing industries for working capital as well as purchase of agro-processing machineries or equipment for plant, crop and animal production in small medium or large scale farming.

The applicants have to present detailed feasibility study and must commit at least 40% of the total estimated project cost.

Coffee farming Term Loan Financing:- It is one form of credit facility granted to customers engaged in commercial coffee farming with minimum 30 hectares of land to finance working capital needs, or new and expansion of existing projects.

The applicants have to present detailed feasibility study and must commit at least 40% of the total estimated project cost.

Micro –Finance Institution's Loan: - It's a short to medium term loan granted to Micro –Finance Institution to alleviate their financial constraints while providing credit to micro-entrepreneurs.

The bank may negotiate the lending interest rate on Micro-Finance Institution's loan.

A foreign Bank Guarantee that covers 75% of the principal loan shall be accepted as collateral.

Local Service Providers

There are a number of Local Service Providers in the form of NGOs, Development Partners and Private Consultants already engaged in the private sector green space in Ethiopia that the Facility may collaborate with and leverage on to effectively engage the private sector and increase flow of funding to the private sector for greening. Value that may be derived from LSPs include but not limited to:

- Marketing, deal sourcing and origination of green projects.
- Provision of pre and post finance business development and technical assistance, coaching and mentorship
    - Preparing green emprises to access credit from DBE or FIs per the terms and risk appetite of DBE and or FIs.
    - Providing BDA and TA to green entrepreneurs to successfully grow and sustain their businesses post commercial finance offer.

Most LSPs in the green space have donors who finance their activities thus Green enterprises may not have to pay for their services. If some LSPs require payment for their service and Green entrepreneurs and or their business is not positioned to pay for the LSP's services, then the Facility may provide grants to pay for the services of such LSPs.

Some of the LSPs in Ethiopia that may be considered by the Facility for their services include but not limited to:

***Climate Innovation Center*:**

The Ethiopia Climate Innovation Center (ECIC) supports the private sector development and co-operatives and offers comprehensive services (selection of promising entrepreneurs, provision of comprehensive training, and start-up financing) to small and medium entrepreneurs. It is supported by numerous development partners.

The ECIC provides a holistic set of early-stage financing, business support and capacity building services to the Ethiopian private sector, including women and rurally based entrepreneurs and business owners, working to develop, launch and grow innovative climate technology ventures that promote Ethiopia's climate resilience and green growth. The targets of the ECIC are:

- Mitigate up to 0.8 million tons of CO2 and protect/avoid loss of 31,000 acres of forest.
- Install up to 120MW of off-grid power capacity, providing additional access to up to 265,000 Ethiopians and 56,000 households.
- Provide access to clean water to up 420,000 Ethiopians and 90,000 households including preventing up to 170 deaths from water born disease.
- Provide better/cheaper food for up to 430,000 households and improve the efficiency of up to 120,000 small-scale farms.
- Overall, contribute to 3.1 million Ethiopians, including women and girls, being less vulnerable to climate change.

To do this, it is:

- Providing flexible financing to: (i) accelerate the development of localized technologies and (ii) catalyze new climate technology businesses.
- Providing critical pre- and post-investment technical assistance to the private sector through developing robust mentor networks and offering targeted advisory services.
- Supporting consistent and favorable regulatory environments, including access to international expertise for climate technology entrepreneurs and businesses.
- Identifying and unlocking market opportunities through providing access to key market and technology information while actively promoting sector opportunities and technology benefits.
- Facilitating linkages with rural and regional partners to: (i) support a targeted outreach and education campaign for women-enabled innovation and (ii) forge linkages with universities and facility providers to support cost-effective access to equipment, office space and talent.
- Focus on women and girls, ensuring both targeted and mainstreamed gender programs are effectively monitored and evaluated.

Sectors targeted are sustainable agri-business, bio-fuels and biomass, transport technologies, micro-hydro and energy efficiency and renewable energy.

26 companies reached the final round of judgment in 2013-14 for proof of concept, this was narrowed down to 8 companies that were awarded between $ 25,000 and $ 37,500 USD in grants.

***Entrepreneurship Development Program (2012) with UNDP*:**
This project is managed with MOFED, MUDHC and FMSEDA. This aims to support small and medium enterprises in Ethiopia in manufacturing and services to improve competiveness and employment creation potential. The project has conducted policy reviews; provided support institutions for SME and links to TVET research institutions and improved access to financial services for SMEs.

Women Entrepreneurship Development Project for Ethiopia (WEDP)*:*
The objective of the WEDP is to increase the earnings and employment of Micro and Small Enterprise, or MSEs owned or partly owned by the participating female entrepreneurs in targeted cities; Mekele, Bahir Dar, Hawasa, Adama, Addis Ababa and Dire Dawa. This will be achieved by: i) tailoring financial instruments to the needs of the participants and ensuring availability of finance; and ii) developing the entrepreneurial and technical skills of the target group and supporting cluster, technology and product development for their businesses. The project has $50 Million USD in committed financing from the World Bank. There are three components to the project

1. Access to microfinance. The aim of the component is to facilitate access to financial services for female growth-oriented entrepreneurs by providing working capital and investment finance through a dedicated line of credit. At the same time, the component aims at improving the capacity of existing Micro-Finance Institutions, or MFIs to serve female growth-oriented entrepreneurs with tailored financial products.
2. Entrepreneurial skills, technology and cluster development. The aim of this component is to develop growth-oriented women entrepreneurs' skills, facilitate their access to more productive technologies that can raise their incomes, and help unleash synergies from clustering.
3. Project management, advocacy and outreach, monitoring and evaluation and impact evaluation.

Private Enterprise Program Ethiopia (PEPE):
PEPE will provide between £56m and £70m to the private enterprises over 7 years from 2012/13 to 2018/19.

20% of total investments is targeted for cotton and textiles green growth objectives. Green growth interventions in which all activities undertaken are developed and implemented from a full Green Growth perspective, with minimized negative impacts to the environment and people involved, have potential to significantly contribute to the target.

The Transformation Triggering Facility (TTF):

The TTF seeks to accelerate Ethiopia´s economic transformation through enhancing, economic growth, skill development and employment creation with a budget of 35 Million Euro. To strengthen the Government of Ethiopia´s ability in target sectors of 1. Leather and leather products, 2. Textiles and Clothing, 3. Agri-processing and 4. Pharmaceuticals. The project aims to strengthen the competitiveness of small and medium sized industries in the priority sectors, Enhance the capacity of Ethiopia´s frontline ministries, government institutions and business organizations to facilitate/manage economic transformation and provide seed funding for Ethiopia to make it a medical and aviation hub in the continent.

The Competiveness and Job Creation Project

To contribute to job creation by attracting investments and improving competitiveness of enterprises in the targeted industrial zones (IZ) and their linked domestic enterprises.

- Component 1:- Institutional and regulatory framework and capacity building
- Component 2: Support for industrial infrastructure
- Component 3: Enhancing IZ linkages to the local economy
- Component 4: Project management and monitoring and evaluation

The Project will benefit medium and large firms that are expected to establish within the industrial zones; SMEs that will act as local suppliers and be part of the value chain for the manufacturing sectors within the IZs; and workers in the IZs; as well as the sectoral institutes which will be involved in the project implementation.

The project will provide large and medium firms with new serviced industrial land and buildings (water, electricity, transportation infrastructure), and with a One-Stop Shop (OSS) - thereby reducing transaction costs of doing business. In addition, benefits are expected to accrue to local suppliers in the priority sectors (leather, textile/garment and agro-processing) since the project will enhance the linkages between firms that set up their facilities in the industrial zones and the rest of the value chain.

Thirdly, the project will benefit people who will be employed as a direct consequence of creation of new jobs in the targeted zones supported by the project. It is expected that predominantly women will be employed in the garment and shoe industries that initially set up business in the IZs. Fourthly, the sectoral institutes will benefit through the project support of their training of trainers (ToT) programs.

Lastly, the Project will support the emergence of a business friendly environment for firms within industrial zones. The Project is funded through an International Development Association (IDA) credit in an amount of US$250 million equivalent. The loan would be for a 40-year period with a 10-year grace period.

Promoting Sustainable Rural Energy Technology (RETS) for Households and Productive Uses

This program, working with MEF and MOWIE the UNCDF and GEF, aims to promote RET for household and productive units. According to the draft plan[21] RET will firstly investigate the policy and legal framework, conduct a public awareness campaign. It will then create a Sustainable Financial Mechanism (SFM) to deliver 2MW and at least 100,000 improved cook stoves. This financial mechanism will continue to operate at the end of the project and take the form of a performance-based Risk Capital Grants to Financial Service Providers (FSP). This includes:

- Concessional Loans, Loan Guarantees, Risk Capital and Impact Investments to small, local energy service providers and RET enterprises (either through FSPs or directly)
- Concessional Loans, Loan Guarantees, Risk Capital and Impact Investments to larger RET enterprises with regional/national outreach (either through DBE or directly)
- Technical Assistance for FSPs and Energy Service Providers/Enterprises to deploy SFM for RETs
- Lessons learned, publications and knowledge management
- Technical Assistance to Government Institutions, Advocacy and Partnership

Further it will create a Business Incubator to Promote Greater Entrepreneurship for Investment in RETs. This will promote a greater number of micro, small and medium scale entrepreneurs and manufacturers are successfully producing and profitably selling RETs both for household consumption and productive uses.

- Business Incubation unit developed including selection criteria and disbursement modalities
- Awarding of grants of up to $5000 to 100 RET entrepreneurs through Business Incubation Unit
- Selection of RET Entrepreneurs conducted (once per year)
- Intensive Business Training Courses for 15 Small and Medium RET Entrepreneurs (Business Plan, Marketing Strategy, Capital Raising) conducted by Ethiopian Climate Innovation Centers (CIC)
- Awarding of grants of up to $50,000 to 5 local RET enterprises through the Ethiopian CIC

[21] *Project Introduction: Promoting Sustainable Rural Energy Technologies (RETs) for Household and Productive Uses. September 2014*

7. CRGE Facility Private Sector Strategy Framework

7.1. Strategic Positioning

As motivated, elaborated and as can be deduced from earlier sections in this document, the CRGE Facility's strategy and business model to engage the private sector will need to incorporate flexibility in order to accommodate the diverse requirements of providers of private sector funding as well as that of private sector beneficiaries of the Facility. The strategy must position the Facility to: -

I. Leverage on public sources of finance
II. Leverage on private sources of finance
III. Have direct access to, or attract private sector funding – DFI, Private Funds, Insurance Companies, FIs, etc
IV. Promote private sector development
V. Target the sectors and people most in need
    a. MSMES
    b. Rural and poor communities
VI. Promote access to finance
    a. BDA & TA
    b. Collateral guarantees
VII. Address life cycle stage constraints faced by private enterprises or projects that hinders their ability to access private sector finance; especially for enterprises or projects at the following stages of their life cycle:-
    a. Pre-investment
    b. Prove of concept/piloting/market testing
    c. Start-ups and early stage
VIII. Target viability gaps by
    a. Increasing project revenues - e.g. through carbon credits, feed-in tariffs, or subsidized services, access to markets or widening of customer base or developing new markets, etc
    b. Reducing project costs through different measures. Traditional instruments include:
        - Investment grants to reduce private investment needs,
        - Concessional loans to reduce the cost of capital, and
        - Tax rebates or cost sharing
        - R&D or project preparation and planning facilities to lower pre-investment costs
        - Utilizing risk mitigation instruments (guarantees, risk-sharing facilities, etc).
IX. Build an enabling ecosystem; traditional initiatives include

- Building a practical MRV system and developing a carbon credit market and bank.
- Champion the building of public infrastructure to the serve as a springboard or to close viability gaps for private enterprises
- Support capacity building for closing knowledge gaps to include marketing and promotion of "Greening"
- Monitor and influence climate and financial policies to remove technical, legal and administrative barriers to private investment;
- Improve the general investment climate for the private sector

Granted that the CRGE Facility cannot lend directly to the private[22] sector, the Facility needs appropriate financial intermediaries to engage the private sector.

An assessment of the Ethiopian financial ecosystem indicate that there is no breadth per financial intermediary options to support the CRGE Facility to engage the private sector comprehensively as motivated from I to IX above. The financial eco-system is dominated by banks providing traditional debt financing to MSMEs, large private and public businesses at various stages of their life cycle, albeit with a concentration on growth and expansion stage enterprises with adequate collateral cover (100% plus).

Aside considerations enumerated from I to IX above, strategic options must take the following into account:-

- Mitigation of moral hazard and "Gaming' on the part of FI's and beneficiaries alike.
- Strive for appreciable returns so the CRGE Facility can grow organically for sustainability
- Building of a positive perception and brand in resonance with private sector stakeholder expectations
- Alignment of interest.

Other critical elements for success include the promotion of private enterprise "Greening"; active deal sourcing or origination and screening to ensure "good fit" to CRGE Facility requirements; and provision of pre-finance business development & technical assistance. There are relevant private sector focused business development assistance and technical assistance Local Service Providers that the CRGE Facility may engage to enhance the success of the Facilities Private Sector Strategy.

Given the limited breadth in FI options in Ethiopia, short, medium and long term strategies must be developed and implemented to provide the ideal support to private sector "Greening".

[22] *FDRE: CRGE Facility – Operational Manual (July 2014 version)*

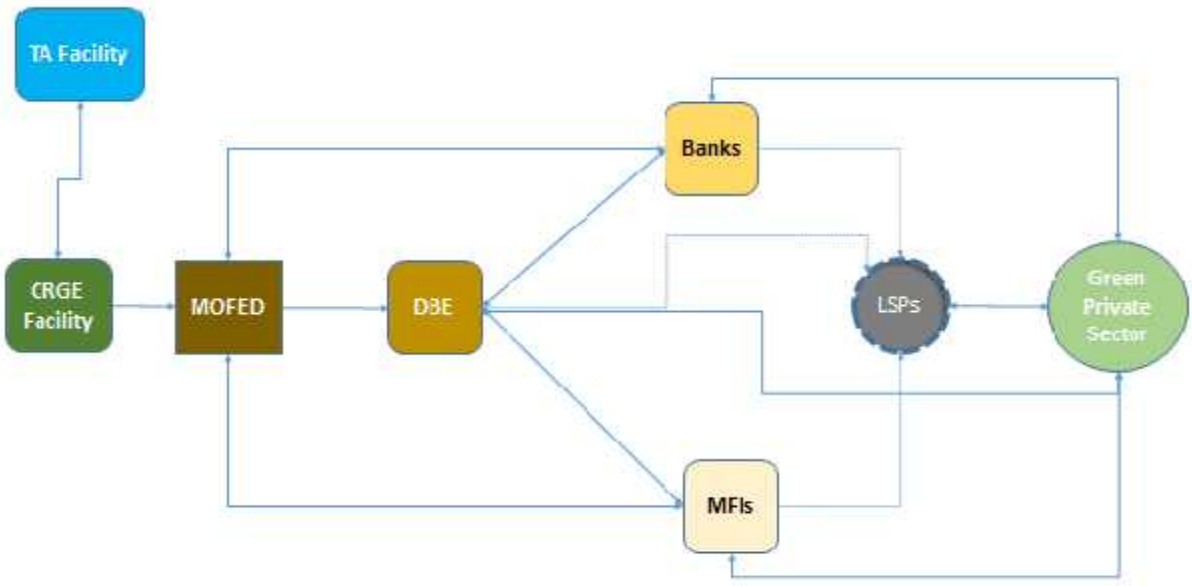
7.2. Short Term Strategy.

The short term engagement strategy for the CRGE Facility is as illustrated in figure 7.2 below. The CRGE Facility shall provide:

I. LOCs to DFIs to on-lend to Commercial Banks (Banks) and Microfinance Institutions to finance Green enterprises. The DFIs may also lend directly to Green enterprises.
II. LOCs directly to Commercial Banks and Microfinance Institutions to on-lend to Green enterprises.
III. A Business Development & Technical Assistance (BDA & TA) Facility to support Green enterprises and FIs that may need TA and BDA.

Per this strategy Green enterprises will go through the DFI, Bank or MFI's normal deal origination and credit appraisal process to access finance. The DFIs, Banks and MFIs may opt to use the services of BDA and TA Local Service Providers for deal origination, pre –finance BDA and post-finance BDA.

Figure 7.2



Sector Focus:

All CRGE Priority Sectors but with a focus on "Low hanging fruits" in CRGE priority sub-sectors such as trading and servicing of solar lamps, solar panels, solar water pumps etc; retail of LED lamps; production and sale of biomass fuel, energy saving cook-stoves, smallholder primary and value add agribusinesses etc.

Business Life Cycle Stage

As preferred by FI. Likely to weigh on growth and expansion stage enterprises as Banks and MFI's portfolios reflect same.

Instruments

- Grants and Debt as debt is the traditional instrument used by Banks and MFIs
- BDA, TA and Counselling.

Engagement

- Leverage by requiring FI's own balance sheet funds contribution as "skin in the game" to increase the flow of finance to CRGE priority sectors and mitigate moral hazard on the part of FIs.

7.3. Medium Term Strategy

In the medium term, the CRGE Secretariat shall champion the set-up of a revolving **CRGE Trust Fund** registered as a state owned private limited liability holding company to:

I. Provide funding to Financial Intermediaries to on-lend or invest
II. Directly support private sector Green enterprises/ projects and
III. Support Local Service Providers to develop CRGE priority private sector enterprises.

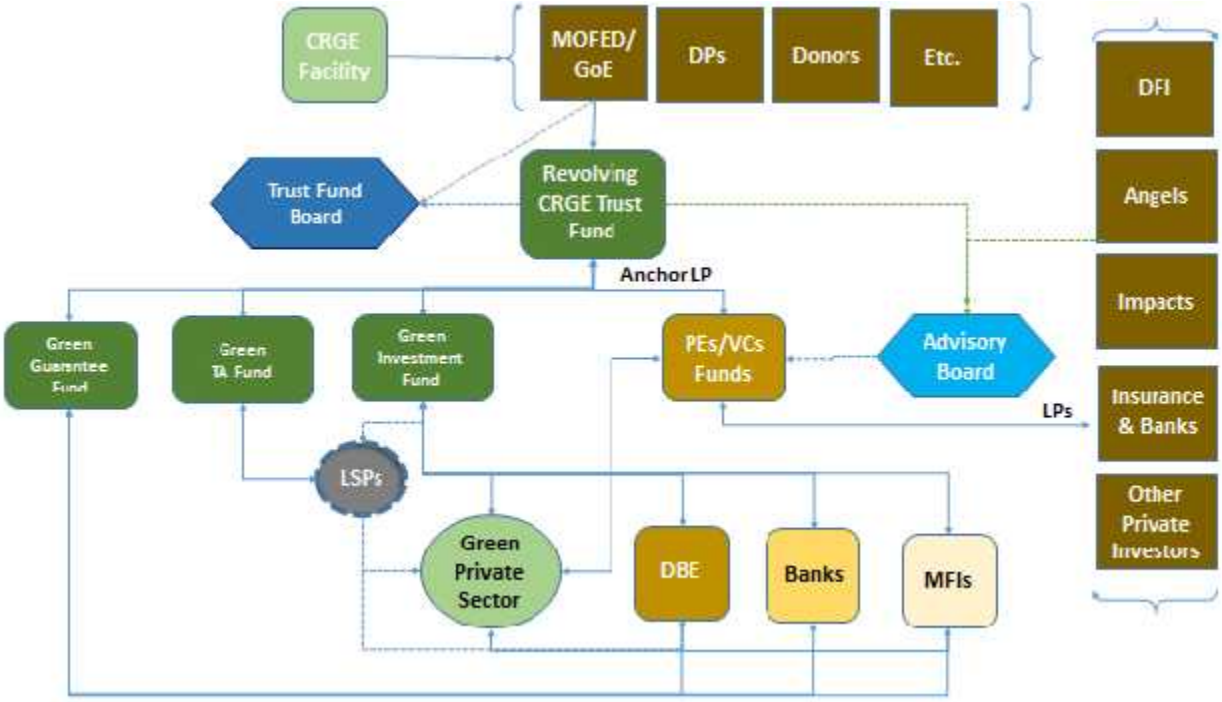
As illustrated in Figure 7.3, the CRGE Trust Fund (Trust Fund) shall be a Master Fund with Feeder Funds as Special Purpose Vehicles targeted at addressing specific private sector greening constraints. A Green Investment Fund (GIF), Green Guarantee Fund (GGF) and Green TA Fund (GTAF) are the recommended initial Feeder Funds in the medium term. The Feeder Funds GIF, GGF and GTAF will be registered as limited liability partnerships with limited life. Investors will be invited to participate in the Feeder Funds as limited partners. The CRGE Facility LOC to DFIs, Banks and MFIs as well as the BDA & TA Facility indicated in the Short Term strategy option may be converted to GIF and GTAF per the implementation of the Medium Term Strategy.

The Trust Fund shall build a Management Team (Manager) to manage the Trust Fund and its Feeder Funds, i.e. GIF, GGF and GTAT. In addition to managing its own Feeder Funds, the CRGE Trust Fund shall act as a Limited Partner (LP) to anchor private Fund Managers acting as General Partners (GPs) to raise their own sector specific Green funds such as Energy Fund, Forestry Fund, Agriculture Fund, Green Manufacturing Fund, etc to further leverage and engage the private sector.

The Manager of the CRGE Trust Fund and the CRGE Facility Secretariat shall collaborate to engage the Government of Ethiopia, Developmental Partners, Donors, etc to continually raise funds for the Trust Fund. Similarly, they will work with, promote and anchor private fund managers in Ethiopia to raise their own sector specific funds with funding from other LPs such as Family Funds and Foundations, Developmental Finance Institutions, Impact Investors, Insurance Companies and other Private Sector investors.

The Feeder Funds of the CRGE Trust Fund and privately managed Funds supported by the Trust Fund in addition to doing same shall work with LSPs for deal origination, screening, due diligence investigation and the provision of BDA and TA to Green enterprises.

Figure 7.3



Sector Focus

CRGE priority sectors in line with GTP II.

Business Life Cycle Stage

Pre-investment, prove of concept, start-up/construction, growth / operational and expansion.

Instruments

- Debt, equity, quasi-equity, guarantees and grants.
- BDA and TA

Engagement

- Directly and or indirectly provide support to private sector FIs to mobilize, access and combine domestic and international, public and private sources of finance to support private sector enterprises and projects in CRGE priority sectors;
- Co-fund with FIs as a leveraging mechanism to increase flow of finance to CRGE priority sectors and also as a mitigation strategy to minimize moral hazard.
- Champion and promote the building of an enabling ecosystem to support private sector enterprises and projects in CRGE sectors. Initial activities may include:

- Marketing and promotion of CRGE facility and or “Greening” in general to the benefit of all FIs,
- Providing capacity building to FIs, GPs and LSPs on Green investment.
- Acting as an anchor to support local FI’s including private Fund Managers (GPs) to raise sector focus funds for Green private enterprises.

7.4. Long Term Strategy

In furtherance of the medium term strategy, the CRGE Secretariat may:

I. Set up a Carbon Bank to develop a carbon market for “Green” private and public CRGE initiatives:-

   MRV of Carbon sequestration and its pricing is often a thorny issue between local green enterprises or projects and international Carbon markets as international carbon buyers often do not trust the MRV systems and instruments used to measure Carbon sequestration in developing countries. Secondly, international Carbon prices often may not be adequate to address viability gaps to act as a revenue side incentive for local private enterprises to go green. To address these constraints, The CRGE Trust Fund should set up a local MRV standard for Carbon sequestration for the Carbon Bank to buy Carbon sequestrated and measured per local standards as an incentive for private sector players who go Green.

II. Partner with local Insurers to develop Green finance insurance products.