CTF PRIVATE SECTOR PROPOSAL
ENERGY EFFICIENCY COMPONENT
A JOINT SUBMISSION FROM IFC & AfDB

Name of Project or Program:	South Africa Energy Efficiency Program (the "Program")
CTF amount requested (US$):	➢ Investment – up to US$13.15 million equivalent (US$6.575 million for IFC's account, US$6.575 million for AfDB's account) ➢ Advisory services grant – up to US$1.0 million (US$0.5million for IFC's account, US$0.5 million for AfDB's account) ➢ Implementation and supervision budget – US$850,000 (US$425,000 for IFC's account, US$425,000 for AfDB's account)
Country targeted:	Republic of South Africa
Indicate if proposal is a Project or Program:	Program

DETAILED DESCRIPTION OF PROGRAM

Proposal Context:

This programmatic proposal is the second of IFC & AfDB's Private Sector Proposals for South Africa under South Africa's Country Investment Plan (CIP) which was endorsed by the CTF Trust Fund Committee on October 27, 2009 allocating up to US$150 million for flexible implementation to the private sector by IFC & AfDB. The proposed program ("the Program") addresses use of CTF funds of up to US$13.15 million for investments and US$1 million for Advisory Services to support private sector energy efficiency (energy efficiency) projects through collaboration with Financial Intermediaries (FIs) and Energy Service Companies (ESCOs). More specifically, the Program seeks to encourage transformation of the energy efficiency sector by establishing a source of funding for on-lending by FIs to small and medium-sized industrial operations for investments in energy efficient equipment. While individual energy efficiency investments are typically small, in aggregate they offer significant potential for reduction of energy consumption in South Africa. These initial funds would help to i) build demand for energy efficiency investments through the demonstration of many successful projects (this in turn creates a growing pipeline of projects for FIs), and ii) and build the capacity of a few initial FIs to develop and maintain lending products to enable such demand to grow. After these first interventions (which largely address risk and knowledge), the economics of the investments are expected to catalyze further growth of the sector without the need for additional subsidies.

This proposal builds off of IFC's principal lesson learned in this sector that financing alone is not enough. Where IFC has worked with financial intermediaries to expand the availability of loans to support energy efficiency investments, we have found that risk guarantees or funding alone do not provide adequate incentive for financial intermediaries to develop and market energy efficiency loans. Strong advisory services and a close working relationship with the financial institution are often required. Commercial funding is not seen as very valuable unless it is complemented by advisory services, which often enables the bank to assess the risks associated with the underlying loan product and other aspects of individual energy efficiency transactions. This Program includes both investment funding as well as an advisory services package.

The Program is consistent with the policies of the Government of South Africa (GoSA) and will

directly support the GoSA's specific goal of employing energy efficiency/DSM to reduce electric power consumption by 12% (approximately 110,000 GWh) by 2015. South Africa's CIP identifies energy efficiency as a key strategic area for application of CTF resources in both the public and private sectors.

IFC and AfDB also intend to coordinate with other multilateral finance institutions (MFIs) where possible. Coordinating with other MFIs presents a valuable opportunity to further leverage funding and expertise in this area given the significant need for intervention in the sustainable energy space. Together the programs should be able to establish enough of a track record to incentivize additional FIs to undertake similar programs without additional subsidies.

Country and Sector Context:
South Africa is the largest contributor to greenhouse gas (GHG) emissions in Africa. In 2000, emissions were 415 million tons of carbon dioxide equivalent ($MtCO_2e$), placing South Africa as the 11th largest emitter globally. The country's emissions per capita are about 10 tons of CO_2/person/year, the eighth highest in the world. The energy sector is the single largest source of CO_2 emissions, accounting for more than 70 percent of the total. This is mainly because of South Africa's heavy reliance on coal to meet its primary energy needs (75% of total energy consumption and 93% of power generation was from coal in 2004) but also because decades of inexpensively priced power has created an economy that does not use electricity as efficiently as it could.

The GoSA is a leading voice in the developing world on climate change issues. It has committed to doing its part to stabilize global temperatures at 2 degrees Celsius above pre-industrial levels, as recommended by scientific consensus. Recognizing South Africa's development needs, the climate change mitigation strategy the Government has adopted envisages an increase in GHG emissions over the short term, stabilized emissions by 2020-2025, followed by an emissions decline in absolute terms by mid-century.

Until recently, South African power costs have been historically low, with inexpensive and subsidized domestic fossil energy resources allowing large industrial and public sector customers to pay prices as low as R0.18/kwh ($0.024). With such inexpensive power the development of the energy efficiency market has generally lagged other countries. However, energy efficiency project economics are improving rapidly due to the recent and planned increases in power tariffs. Several important and substantial energy efficiency markets are economical and commercially viable to develop now, with simple payback periods on energy efficiency investments of between 3 to 5 years such that projects can be self-financing from energy cost savings or energy sales revenue. Market segments with the greatest potential include: industrial / mining, for a range of end-use technologies such as lighting, motors, compressors, air conditioning, pumps, fans and cogeneration; commercial real estate for lighting and heating, ventilating and air conditioning; commercial solar hot water; and thermal power plant parasitic load energy efficiency projects. Funding requirements for commercially viable energy efficiency investments over the next 3-4 years have been estimated at well over $100 million— sufficient to motivate and justify a CTF program and entry of several FIs into this market.

Barriers to Private Sector Development:
Energy efficiency investments typically have attractive economic rates of return and financial rates

of returns but fail to meet investor thresholds in terms of "bottom line impact" in comparison to alternative investments. While energy related policy has become a priority for the GoSA, energy efficiency has not yet become a priority for the South African private sector. Short-term impediments to private sector energy efficiency lending which have stalled progress include:

Company related barriers (especially prevalent among small and medium sized enterprises)

1. Companies are often inadequately informed about the energy savings potential and energy saving options when making new investments. Capital expenditures are typically made to replace old technology, to increase capacity, and to upgrade technology from a quality perspective. Most companies are not aware of, and do not base their investment decisions on, the potential energy savings achieved from each new investment. Generally the level of awareness about potential energy efficiency improvements is low in South Africa, despite the fact that the government has announced energy efficiency /Demand-Side Management as one of its energy policy priorities.
2. South Africa's low electricity prices, resulting in long payback periods for investments in long-lived energy efficient equipment (e.g., HVAC systems, appliances, motors, and drives);
3. For non-energy intensive industries, energy efficiency projects that are independent of larger capital investment programs are often small in nature. As a result, the attractive returns from such projects do not warrant management attention given their limited impact on the overall bottom line of the company.
4. There is a lack of suitable financing arrangements. Typically financial intermediaries assess companies on their past financial performance and do not consider the expected improvement in net revenue (via reduced costs) which results from installation of new energy efficient equipment. As a result, financing terms can be restrictive and unattractive for borrowers. In addition, companies with limited investment funds are often seeking off-balance sheet solutions which are not currently available in the market.

Financial institution related barriers

1. Financial intermediaries in South Africa are hesitant to provide energy efficiency financing as a specific product line since they associate such funding with higher transactional costs as a result of their lack of experience with the technologies and market opportunities, and the need for a more specialized approach. FIs will point to complicated reporting requirements on technical details as one component of increased costs for them and their clients. Additionally, banks do not typically have internal resources to evaluate such reporting from their clients and don't have scoring systems adjusted to the additional requirements; nor are their marketing staff trained to provide detailed product information or identify clients that are appropriate for energy efficiency projects. As a result of these hurdles, real and perceived, financing on fully market rates does not provide banks a sufficient return to venture into an energy efficiency line of business.

Program Summary:

The proposed program represents an IFC & AfDB joint initiative to address energy efficiency improvements for the commercial, industrial, and municipal sectors with a particular focus on smaller-scale energy efficiency projects for the SME sector and, use of ESCos (Energy Service Companies) as effective energy efficiency project aggregators. The Program will target commercial

private banks and/or financial leasing companies for on-lending of funds as a means of promoting energy efficiency projects in South Africa and addressing the barriers described above.

IFC/AfDB's private sector energy efficiency program would also help promote demand for energy efficiency investments by working with support SMEs, the commercial, industrial, and municipal sectors in the scale up of smaller energy efficiency projects in South Africa. In addition to catalyzing local FIs to develop lending programs for small sized energy efficiency investments and to reach market segments not covered by other GoSA programs, the Program will address the knowledge barriers faced by end users through its Advisory Services program. To reach SMEs the Program is proposing to work with banks and/or leasing companies and to utilize their outreach into the SME sector. Commercial and municipal sectors may also be targeted based on each FI's internal market strategy. It is anticipated that the first of these transactions will be closed within three to six months of approval of the proposal.

Use of CTF funds:
The proposed Program will encourage local FIs to develop lending programs for small sized energy efficiency investments. In the MDBs' experience, financial intermediaries can be very effective in educating their clients and enabling wide scale uptake of new product lines such as energy efficiency technologies. Working through local financial intermediaries is particularly appealing in this instance given the scale required to have a climate change impact. In the proposed structure scale is achieved via the local FIs' business networks and client relationships. Leasing companies have also proven to be an effective way of reaching SMEs. Leasing is an effective way of keeping energy efficiency investments off-balance sheet and makes smaller investments more attractive. In many markets, leasing companies finance a variety of energy efficiency technologies including cogeneration units, boilers, compressors, chillers, control systems, high efficiency motors, and other technologies. The Program's advisory services component will support the investment component by addressing many of the knowledge and capacity barriers outlined above.

The use of financial intermediaries to promote private sector development is a successful business model which has been applied by IFC in other emerging markets, but not yet at scale inside South Africa. With the addition of CTF support, this model can be employed with South African financial intermediaries with significant potential to transform an important part of the market. It is an extended, innovative approach for the South African market. In the absence of CTF funding, the MDBs would not be able to provide resources on the terms and in the quantity needed to incentivize uptake by the FIs and achieve meaningful transformation.

In South Africa, there is intense competition among the local financial intermediaries. Therefore, an energy efficiency initiative with the participation of just one or two banks could create a copy-cat effect resulting in an industry wide impact. IFC's experience in similar markets such as Central Europe, Russia, and China clearly shows that demonstrating success with a couple of market leaders quickly spurs other institutions to follow suit as they recognize the value energy efficiency financing products can bring to their own operations, i.e. once there are first mover financial intermediaries, and market awareness increases, energy efficiency investments become more popular and market opportunities grow exponentially (energy efficiency equipment becomes a competitive advantage among end users therefore demand grows, the increased pipeline attracts more FIs to provide competitive financing products – which they are willing to do given that risk will have reduced since

a track record would have been established). At the same time, the availability of financing for energy efficiency technologies brings additional benefits, such as the development of the necessary systemic infrastructure, including energy auditors, project developers, and sustainable energy technology providers. The combined IFC/AfDB initiatives aim to achieve such an effect by: i) targeting strategic financial intermediaries with wide outreach in a sustainable manner, ii) building the necessary capacity within FIs, iii) raising end-user awareness, and iv) establishing financial mechanisms and technical structures adjusted for the specifics of the South African market.

The Investment Component

Through the Program, the MDBs will provide a combination of their own and CTF financing to commercial private banks and/or private financial leasing companies on terms necessary to address the barriers outlined earlier and to catalyze uptake and scale-up of energy efficiency projects in South Africa. The CTF and MDB funds would be used to on-lend to individual projects varying between US$0.3-5.0 million of loans/leases, targeting investments in energy efficiency primarily in private industrial companies/SMEs. The expected useful life of the proposed sub-project investments will be from 10-15 years with appropriate tenors for sub-loans. Such financing structures would help ensure that end users have little to no negative impact on their cash flows during the payback period (as energy savings would potentially off-set the financing costs) and would receive the full benefits of the energy/cost savings following the payback period.

The Program's financing will be structured to incentivise financial intermediaries to mitigate the perceived risks and climb the learning curve necessary to develop energy efficiency financing into a viable business. Although the current market may not require risk sharing, a portion of the CTF funding may also be used to support more sophisticated risk sharing products if market conditions and requirements of clients change in the future.

Once the first few financial intermediaries are operating successfully and a track record is established for the new products, the financial attractiveness of energy efficiency projects is expected to create sufficient incentive to entice additional financial intermediaries to undertake the learning curve without further CTF support.

Terms of the CTF funds

Concessional Interest Rates: CTF funding will be offered at a concessional interest rate to provide the incentive for financial intermediaries to change their lending behaviour in favour of energy efficiency finance. Concessional interest rates will be seen by the "early mover" financial intermediaries as off-setting some of the transaction costs associated with developing a new business infrastructure (eg. project review and reporting procedures) for an untested market in energy efficiency finance. It must be understood that for FIs to develop a new and "untested" product line is a challenge. Further coupling this with new, "complex" financial structures (such as a risk sharing facility), is not something FIs are willing to do from a standing start. The MDBs plan to maximize the impact of the concessional interest rates, by encouraging financial intermediaries to use such subsidies to motivate their loan officers to promote the Program at a faster rate. IFC has some evidence that when financial incentives are provided to the officers on the ground, there is faster learning and uptake of new activities and an incentive to "sell" the products, and thus build capacity within the bank in this area of business. The exact interest rate, tenor and amount of the CTF component of any loan will vary based on the specific needs of each FI (eg. a 12 year loan may

receive a slightly higher interest rate than a 10 year loan to notionally reflect the increased risk).

Eligible Investments in Energy Efficiency:
The energy efficiency market is best understood as a diverse set of markets, covering multiple end-use sectors including commercial, industrial, small and medium enterprise (SME) and municipal/public/institutional. The market can also be segmented by technology, for example, lighting, cogeneration, industrial motors, commercial solar hot water heating, etc. Another market segmentation can be defined by "delivery" stakeholder, i.e. ESCOs (Energy Service Companies), vendors, manufacturers of energy efficient technologies, turn-key contractors and other companies specializing in energy efficiency.

Key end-use sectors in the South Africa energy efficiency market which we expect FIs to target include:

- mining and large industry, including energy efficiency technologies such as lighting, motors, compressors, air conditioning, pumps and fans as well as cogeneration;
- commercial buildings (office buildings, malls, big box retail, hotels, data server centres, hospitals), including for lighting, controls, heating, ventilating and air conditioning, and solar hot water systems; and,
- thermal power plant energy efficiency targeting reduction of parasitic plant loads for fans, motors, etc.

Attention is currently being paid to the public/municipal sector for energy efficient street lighting and municipal buildings, but power tariffs in this sector are so low that project economics are weak. Municipalities though are major players in this market and cannot be overlooked as many operate power distribution systems within their jurisdictions.

Eligible investments (sub-projects) will meet the following eligibility criteria established by the MDBs in conjunction with the South African FIs:

- Each eligible **energy efficient** sub-project must be a project to finance reconstruction, renovation or refurbishment in a corporate/SME sector entity in South Africa;
- Financing may be in the form of sub-loans to be invested into fixed assets and decreasing energy consumption of the sub-borrower or utilizing renewable energy on the sub-borrower's premises
- Each **energy efficient** sub-project loan must generate a minimum energy savings as follows:

Decrease in per unit energy consumption (kWh/unit (m2, production etc.)	**<u>≥20%</u>**

- Financing must be for new projects, not refinancing of an existing loan.
- Eligible borrowers are all borrowers according to standard IFC/AfDB requirements.

Examples of Types of Eligible Energy Efficiency Measures:

1. **Energy services (supply/demand) related technology** investments which are common to many industrial companies and end users. Examples are boilers, building envelope insulation, variable speed motors, cogeneration equipment, heat recovery, renewable energy

equipment etc. These investments often have energy savings and/or renewable energy production as the primary benefit of the investment and determining eligibility is therefore straightforward.

2. **Process related investments** which are usually industry specific, and which relate to changes/upgrades in production process and equipment. In these projects the energy savings are often only one of a range of production related benefits such as: reduced material usage, increased throughputs, and improved product quality.

Final Note Regarding Flexibility:
Although initial discussions with clients indicate that CTF would need to be used as low interest senior loans, the dynamic environment with regard to the evolution of regulations and the development of different private sector initiatives in South Africa require that the Program retain flexibility in structuring the best way to accelerate the implementation of energy efficiency funding. The financial instruments, their pricing and terms of the CTF funds offered to FIs will be tailored on a case-by-case basis to address the barriers identified for each financial intermediary. IFC and AfDB will seek to provide the minimum concessionality necessary to enable FIs to move toward a market engagement that they would otherwise not undertake. In our view, this approach will lead to the creation of a sustainable energy efficiency sector in South Africa and will ultimately enable a greater capacity of energy efficiency to be developed in South Africa in the medium term promising long-term solutions for South Africa's power needs.

Finally, please note that final agreement to provide CTF funding to any individual FI for on-lending to sub-projects would be subject to a full due diligence and approval by an internal IFC and/or AfDB approval body as well as IFC and/or AfDB's Board, per the CTF private sector guidelines.

Advisory Services:
IFC & AfDB have learned from experience that targeted advisory support can further accelerate the development of a country's renewable energy sector by creating an enabling environment for future and parallel investments.

IFC's energy efficiency finance advisory work targets financial intermediaries (local banks) in client countries and provide them with technical assistance and some risk-sharing finance to encourage and develop their lending to private sector—particularly for SMEs—for energy efficiency improvements.

Lessons from energy efficiency finance projects

- There is a clear lack of awareness about the benefits of energy efficiency gains in the market at large. Key market stakeholders like energy services providers (ESPs) and financial institutions are inadequately informed about the significant market potential for energy efficiency finance (SEF).
- Committed local partner bank(s) is/are essential. Energy efficiency financing is a new business and requires in-depth advisory services such as organisational development and skills training for the partner financial institution to develop an SEF product, investment

porftiolio and understanding of the technical implications of implementing energy efficiency projects and their risks.

- Presence and increased capacity and skills of ancilliary energy service providers (ESPs) is significant. These key market stakeholders play a critical role in building and sustaining energy efficiency finance market demand for FIs, and provide key services in implementing energy efficiency projects.

The IFC & AfDB advisory services component will be managed by IFC's ongoing technical assistance and capacity building program-- the Climate Change Investment Program for Africa (CIPA) in South Africa (SA). CIPA SA responds to the market dynamics noted above and will assist in coordinating and developing the energy efficiency finance market in South Africa. The program will thus assist in providing the necessary support to catalyze growth. IFC & AfDB will develop and promote an advisory services (AS) program that will:

1. **Strengthen financial markets by providing specialized technical assistance to FIs who partner with IFC and AfDB in developing an energy efficiency investment program for South Africa.**

   AS in this regard will help financial intermediaries; (i) effectively respond to the clearly defined market potential for sustainable energy in South Africa; (ii) address the main barriers to implementing and scaling up sustainable energy in South Africa, and (iii) embed sustainabale energy finance procedures (including appropriate tools) into banking operations.

2. **Coordinate and assist in developing the market.**

   Capitalizing on the potential for sustainable energy in South Africa is dependent on addressing capacity gaps. In this regard, IFC & AfDB will work with key market stakeholders, in particular the South African National Energy Development Institute (SANEDI), to address the capacity gaps in the market. The South African sustainabale energy market has pockets of significant sophistication and development, but the market is largely uncoordinated and not effectively structured to support mainstreaming of sustainable energy in South Africa. IFC & AfDB AS will thus address this market dynamic through two very specific activities, namely:

   (i) Assist in coordinating and integrating South Africa's fragmented sustainabale energy finance market by leveraging current market dynamics and expertise in favor of sustainabale energy finance development, and

   (ii) Assist energy service providers to develop bankable projects and access sustainable energy finance.

3. **Raise awareness and advocacy / Knowledge Management.**

Market awareness on sustainable energy finance is constantly improving in South Africa, but market intelligence outlines further opportunities for raising market awareness:

- Share information on market coordination activities, for example answering the questions which sustainable energy finance products are being developed in the market, by whom, and which donor agencies and DFIs are involved in sustainable energy finance?
- Develop and disseminate case studies on successful sustainable energy finance "stories", in particular lessons learnt from the CIPA SA pilot partner banks and projects.
- Provide clear market signals from Government and other agencies that might support sustainable energy finance through incentives (for example ESKOM). This information will

take the form of short industry targeted fliers and brochures, as well as web-page updates.

As envisioned, the advisory services to financial intermediaries will cover the following:

Phase I (4-6 months):

a. Portfolio review – to identify potential clients with respect to the energy efficiency product
b. Initial briefing of bank officers about the product
c. Assessment of sustainable energy opportunities and identification of potential projects for selected clients to demonstrate the process and business size
d. Preliminary product development based on outcomes of the above assessment

Phase II:

e. Development of a product description and implementation manual
f. Training for key front- and mid-office staff
g. Development of promotion materials and activities
h. Transaction support and hand-holding of financial intermediaries through initial deals
i. Progress review meeting and report on results

Describe the Proposal's strategy for achieving market transformation:

South Africa's electricity sector is facing a critical phase in its development. To date it has been monopolized by Eskom, the state-owned, vertically integrated utility now forecasting a massive 12GW growth in demand over the next 5-7 years. Further, the dominant source of electricity generation has to date been from coal-fired power plants (coal provides for 75% of all energy consumed) but if South Africa is to address climate change and achieve its goals under GoSA's Long Term Mitigation Scenarios (LTMS) it must receive an increased contribution from Demand-Side Management initiatives such as energy efficiency investments.

The combined IFC/AfDB Program is expected to result in a transformed financial sector which views energy efficiency financing as a standard business practice, as well as transformed SME, commercial, industrial, and municipal sectors, which view energy efficient technologies as standard ways of operating an efficient business and competing in the market. The Program is a long-term effort to build on the momentum in South Africa's business community and society in general, which so recently became aware of the acute need to adopted energy efficiency as an affordable means to sustainable growth. The recent financial crisis and local recession may have softened this rational behavior and therefore it is especially important to start the Program now, as it can boost recovery across a broad spectrum of the economy. Without CTF participation it would be much harder, even impossible, to establish market acceptable conditions for such an energy efficiency finance program.

The Program is consistent with the policies of the GoSA and with South Africa's Country Investment Plan (CIP) which was endorsed by the CTF Trust Fund Committee on October 27, 2009. The Program will directly support the GoSA's national targets for energy efficiency improvement (12 percent by the year 2015). South Africa's CIP identifies energy efficiency as a key strategic area for application of CTF resources in both the public and private sectors.

IFC and AfDB will leverage their deep, international experience to support FIs in these first of kind

transactions. It is anticipated that IFC and AfDB will act as co-lenders along with CTF to provide funds to FIs in South Africa. IFC will commonly take the lead in structuring the transaction and potentially act as "agent" or lead mandated arranger (LMA) on behalf of AfDB and CTF. IFC and AfDB will consult and work jointly in the most effective and efficient manner to apply CTF funds with minimum concessionality and to ensure that key barriers preventing expansion of private sector investment in energy efficiency are addressed.

FIT WITH INVESTMENT CRITERIA

Potential GHG Emissions Savings:

The Program is structured through financial intermediaries; therefore precise composition of the financial intermediaries' loan portfolio can be only estimated.

One benchmark described in the Country Implementation Plan considers Eskom's five-year DSM plan (2006-2011), which includes a target for the industrial, commercial, and household sectors combined of 10,000 GWh per year (3000 MW), at a cost of 20 billion Rand, or about 0.2 R/kWh levelized costs, for long-lived energy-efficiency investments (e.g., motors and HVAC systems). The cumulative emissions savings from realizing this goal was estimated by Eskom at 70 Mt CO2e.

The Program will support implementation of energy efficient investments which would likely not otherwise be implemented due to institutional and financial barriers and the incremental risks perceived by financial intermediaries.

Total emissions for the lifetime of the Program (15 years life of the technology financed) are expected to be approximately 2.36 million t/ CO_{2e}.

Cost-Effectiveness

Based on the above calculations, the implied direct GHG reductions per CTF dollar spent will be 0.18 tons CO2e/$ and the implied indirect GHG reductions per CTF dollar spent will be 0.22 tons CO2e/$.

Demonstration Potential at Scale

Once again, as described in the Country Implementation Plan, the energy efficiency potential in South Africa is vast, and so is the *replication and scalability potential* of energy efficiency subsector interventions. If the interventions described above contributed 25% to the achievement of the target, this would represent an annual primary energy savings of 100 Petajoules, or an annual electricity savings of 27,500 GWh. If this goal were achieved, it would represent an annual reduction of 7,500 GWh – three quarters of the energy efficiency goal of Eskom's five-year DSM plan. The equivalent lifetime carbon savings would be well over 50 million t CO2 equivalents.

Development Impact/ Poverty Reduction

The expected co-benefits achieved by the Program include:

- More rapid and broad-based scaling-up of energy efficiency investment in South Africa. By providing easier access to financing where needed, and additional technical assistance, energy efficiency investments will scale up at a much faster pace.

- The Program's support in the development of financial products for energy efficient equipment will help the end users to find proper financial instruments and to raise awareness about the availability of finance among industries and other end users.
- Long term funding that will be provided to financial intermediaries through the Program will enable them to on lend to SMEs (including woman and minority owned) with longer tenors, so that the SMEs can undertake the necessary sustainable energy investments, which require longer term financing.
- By accelerating the development of the energy efficiency sector and supporting its achievement of critical scale in South Africa, the Program will open up opportunities for potential future energy efficiency equipment manufacture in South Africa with its associated employment benefits.
- The implementation of energy efficiency projects for the underlying sub-borrowers (lessees) will increase long-term sustainability of operations, improve competitiveness, and bring financial benefits through lower costs and improved process efficiencies.
- This in turn may lead to production expansion, and thus an increase in jobs (including potentially more technical jobs) as well as an increase in waged salaries to their employees. All of which would have trickle-down effects on the livelihood of people and their families.

It should be noted that these impacts would be indirect and difficult to measure, except as part of a broader assessment of market evolution in South Africa done several years after the implementation of the program.

Implementation Potential:

See description above regarding South Africa's energy efficiency market for details on the market context. This project, along with other World Bank/AfDB CTF related interventions is expected to help the GoSA implement its Long Term Mitigation Strategy.

Additional Cost & Risk Premium

The interest rate, tenor, and amount of the CTF senior loan to be provided under the Program will reflect the need for subsidies but also current market conditions. CTF funding will help overcome barriers to market transformation for the Program.

Financial Sustainability

By offering concessionary priced funding with longer maturity and capacity building, the Program will establish a track-record for the viability of commercial financing for energy efficiency projects and will play a significant role in accelerating market development. Once the initial partner FIs have developed their internal capacity and see that energy efficiency finance is profitable without concessional interest rates, they are expected to continue the line of business without the need for further subsides. Finally, the announced increases in Eskom's power tariffs will increasingly make energy efficiency investments more attractive further eroding the need for concessionary priced funding.

Effective Utilization of Concessional Finance

Over the past two years, IFC has been assessing the energy efficiency market and trying to convince South African financial intermediaries to jump into this new market, but it has become clear that local FIs are reluctant to invest in developing products and allocating financial resources to this market. The anticipated sub-projects would not be undertaken by local FIs if the concessional finance portion (interest rate subsidy or risk sharing components) is missing.

Financial intermediaries that receive funds from the Program must fully comply with IFC standard financial covenants and reporting requirements, in addition to other covenants and requirements that would be determined during the due diligence undertaken at these institutions.

Mitigation of Market Distortions

The proposed Program will not distort the market, since it will not be displacing any private sector investment. The financing provided by the banks and/or leasing companies will be used by FI clients.

Risks

Risks associated with the Program include:

- **Market awareness:** South Africa still lacks a sufficient level of market awareness for energy efficiency investments and support is limited on the private level. Therefore, companies and SMEs have low level of motivation to undertake such investments.

  Mitigant: The new Eskom investment strategy, related tariffs, and regulatory measures provide stronger support for energy efficiency initiatives. In recovering from the local recession, companies will be attracted to the monetary savings afforded by energy efficiency investments. Finally, the program itself will provide basic market awareness activities and will work with FIs and end-users to motivate them.

- **Entry into energy efficiency market**: Energy efficiency is a new market segment in South Africa. The banks and non-bank FIs are hesitant to take a leadership role in financing this untapped market need for financial products that promote energy efficiency. Therefore, the participating FIs need to actively market this new energy efficiency product.

  Mitigant: The advisory services component, in particular, the energy efficiency training, is expected to assist in mitigating this risk by supporting the FIs in developing the energy efficiency products for this new market segment. Furthermore, the combined offer from development banks and CTF will trigger the participating FIs to leverage their existing relationships with their client bases to successfully deliver energy efficiency financing product to its clients in the SME segment.