



# Sustainable Guarantee Facility (SGF)

Sri Lanka

May 2004

Prepared by

 **Nexant**

Contract No. 386-C-00-03-00135-00

Prepared for

**Energy Conservation Fund/  
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- Mrs. Ramani Nissanka – Project Manager, Sri Lanka Energy Managers’ Association
- Mr. Indika Gallage – Manager Projects, LTL Energy Ltd

## List of Acronyms

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ADB	Asian Development Bank
AED	Academy for Educational Development
BOC	Bank of Ceylon
CBSL	Central Bank of Sri Lanka
CEB	Ceylon Electricity Board
CEO	Chief Executive Officer
CRIB	Credit Information Bureau
DCA	Development Credit Authority
ECF	Energy Conservation Fund
EE	Energy Efficiency
ESCO	Energy Services Company
GEF	Global Environmental Facility
GOSL	Government of Sri Lanka
IFC	International Financial Corporation
JBIC	Japan Bank for International Cooperation
M&V	Monitoring and Verification
NPL	Non Performing Loans
NUEC	National Electric Utility of Croatia
PCI	Participating Credit Institution
PFC	Power Factor Correction
PFI	Participating Financial Institution
Rs	Sri Lankan Rupees
SARI/Energy	South Asia Regional Initiative for Energy
SELCO	Solar Electric Company
SGF	Sustainable Guarantee Facility
SLECIC	Sri Lanka Export Credit Insurance Corporation
SLEMA	Sri Lanka Energy Managers' Association
SMI	Small and Medium Industries
UBB	United Bulgarian Bank
US	United States of America
USAID	United States Agency for International Development
WB	World Bank

# Contents

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Section	Page
<b>Executive Summary</b> .....	<b>iv</b>
<b>1 Background</b> .....	<b>1-1</b>
1.1 Present Status of Energy Sector .....	1-1
1.2 Energy Efficiency/Conservation Potential .....	1-2
1.3 Barriers for Energy Efficiency/Conservation .....	1-2
1.4 SARI/Energy Objectives .....	1-2
1.5 Energy Service Companies (ESCOs) .....	1-3
1.6 Market Components .....	1-3
<b>2 Introduction</b> .....	<b>2-1</b>
2.1 Worldwide Energy Efficiency Financing Mechanisms .....	2-1
2.2 Conditional Loans as a Vehicle to Support ESCO Projects .....	2-2
2.3 Utility as the Main Borrower for ESCO Projects .....	2-2
2.4 Design-Build Contract Model .....	2-3
2.5 Interest Rate Buydown Grant .....	2-3
2.6 Direct Loan Structure .....	2-4
2.7 USAID Development Credit Authority .....	2-4
2.8 Fund Mechanisms Used in Sri Lanka .....	2-6
2.9 Loan Guarantee Mechanisms in Sri Lanka .....	2-7
2.10 Fund Mechanism Proposed for Sri Lanka .....	2-8
<b>3 Sustainable Guarantee Facility</b> .....	<b>3-1</b>
3.1 Purpose .....	3-1
3.2 Overview .....	3-1
3.3 Key Stakeholders .....	3-1
3.4 The Facility .....	3-2
3.5 Important Features .....	3-2
<b>4 Institutional Framework</b> .....	<b>4-1</b>
4.1 Energy Conservation Fund (ECF) .....	4-1
4.2 Participating Financial Institutions (PFIs) .....	4-1
4.3 Energy Service Company (ESCO) .....	4-1
4.4 End-Users (Borrowers) .....	4-2
4.5 Tasks for ECF .....	4-4
4.6 Tasks for PFIs .....	4-4
4.7 Tasks for ESCOs .....	4-5
4.8 Tasks for End-Users .....	4-5
4.9 Loan Guarantee procedure .....	4-6
<b>5 Operating Guidelines</b> .....	<b>5-1</b>
5.1 Eligible Applicants .....	5-1
5.2 Eligible Energy Efficiency Improvement Projects .....	5-1
5.3 Terms and Conditions for Loan Guarantee .....	5-1
5.4 Loan Guarantee Application Procedure .....	5-2
5.5 Declaration and Undertaking by the PFI .....	5-3
5.6 Issuance of Guarantee .....	5-4
5.7 Procedure for Claiming SGF's Guarantee .....	5-4
5.8 Definition of Default .....	5-4
5.9 Notice of Borrower Delinquency .....	5-4

5.10 Rescheduling of Borrower Payment Terms .....	5-5
5.11 Recovery .....	5-5
5.12 Division of Recovery .....	5-5
5.13 Loan Guarantee Termination Provisions.....	5-5
5.14 Supplementary Provisions.....	5-5
<b>6 Management of SGF .....</b>	<b>6-1</b>
6.1 Role & Responsibilities of SGF Staff .....	6-2
6.2 Functions of the SGF.....	6-3
6.3 Finance Manager’s Unit .....	6-3
6.4 Director of Energy Management’s Unit.....	6-5
6.5 General Manager/CEO and Operations.....	6-7
<b>7 Capacity Building/Training.....</b>	<b>7-1</b>
7.1 Energy Conservation Fund.....	7-1
7.2 Participating Financial Institutions.....	7-1
7.3 Energy Service Companies .....	7-2
7.4 End-User Awareness and Program Publicity .....	7-2
7.5 Schedule of Proposed Capacity Building/Training.....	7-3
<b>8 Recommendations .....</b>	<b>8-1</b>
8.1 The Facility .....	8-1
8.2 Institutional Structure.....	8-1
8.3 Management Structure for the SGF .....	8-1
8.4 Financial Resources for the SGF.....	8-2
8.5 Loan Guarantee Limit .....	8-2
8.6 Loan Loss Reserve .....	8-2
8.7 SGF Potential .....	8-2
8.8 Premium on Loans Guaranteed.....	8-2
8.9 Operating Guidelines.....	8-2
8.10 Training and Capacity Building.....	8-2
8.11 Implementation Schedule.....	8-3
8.12 Project Review .....	8-3
8.13 Guarantee for Renewable Projects.....	8-3
<b>Bibliography.....</b>	<b>9-1</b>
<b>Appendix A: Minutes of the Meetings.....</b>	<b>A-1</b>
<b>Appendix B: ECF – Organizational Chart .....</b>	<b>B-1</b>
<b>Appendix C: Task Order Work Plan .....</b>	<b>C-1</b>
<b>Appendix D: ECF Letters.....</b>	<b>D-1</b>

Figures	Page
Fig 1.1: Current and Future Hydro/Thermal Mix in Sri Lanka.....	1-1
Fig 1.2: Guaranteed Savings Model (GSM).....	1-3
Fig 3.1: SGF Operational Structure.....	3-2
Fig 4.1: Institutional Framework – Loan Guarantee Process.....	4-3
Fig 6.1: Proposed Structure of the SGF.....	6-1
Fig 6.2: Credit Loss Distribution.....	6-4
Fig 6.3: Flow Chart for SGF Roles and Functions.....	6-8
Fig 7.1: Schedule of Proposed Capacity Building /Training.....	7-4
Fig 8.1: Proposed Project Implementation Schedule	8-4

## Executive Summary

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The importance of energy conservation/efficiency for mitigating the impact of increasing energy costs in Sri Lanka has been recognized. Studies have shown that the net potential benefit from industrial energy efficiency improvements correspond to an annual generation saving of Rs. 4.2 billion. However, there are barriers that have hindered the widespread commercialization and large-scale implementation of end-use energy-efficiency improvements.

To overcome the barriers for energy efficiency project investments and to reduce the cost of borrowing, a Sustainable Guarantee Facility (SGF) is proposed for Sri Lanka. As the lack of collateral has been the main barrier for energy efficiency project lending, the SGF will provide a loan repayment guarantee to lenders as a collateral substitute. This guarantee will serve to lower the cost of financing for borrowers and encourage the pursuit of energy efficiency projects, thus substantially increasing funding of energy efficiency projects.

As a first step in developing a mechanism for Sri Lanka that could support sustainable and replicable energy efficiency projects, various worldwide and local approaches for financing of energy efficiency projects — loan guarantee mechanisms used in Hungary, China, US, Germany and France; conditional loans as a vehicle to support ESCO projects in the Republic of Georgia and India; interest buydown mechanism in Poland; market credit enhancement mechanisms in Bulgaria; credit guarantee facility operated by the Central Bank, export credit insurance scheme, power factor correction and the E-Friends loan facilities in Sri Lanka. — were reviewed.

Key stakeholders for the SGF in Sri Lanka were identified:

- Energy Conservation Fund (ECF), under the Ministry of Power and Energy as the facility manager;
- Financial institutions selected by the ECF as participating financial institutions;
- ECF-certified energy service providers as project developers; and
- End-users as borrowers.

The SGF management unit at the ECF is expected to have a mix of professionals who are experienced in both the technical and economic aspects of energy efficiency project development and implementation. To ensure sustainability of the facility, the roles and functions of this unit are clearly defined in Section 6 of this report

Financial resources for the SGF are expected from contributions from the Government of Sri Lanka, donor agencies (e.g., Asian Development Bank, World Bank, and Japan Bank for International Cooperation) and short-term investments of the SGF reserve fund by the ECF. The ECF is expected to make an initial contribution of Rs. 50 million.

A fund reserve of **15%** of loans guaranteed, based on the highest non-performing loan portfolio of leading banks in Sri Lanka, is expected to be set aside by the facility as a loan loss reserve. The loan guarantee will be limited to **75%** of the loan approved by the participating financial institution. With an initial investment of Rs. 50 million, the SGF is expected to support around Rs. 400 million in energy efficiency investments.

The facility operating guidelines (Section 5 of this report) identify leading financial institutions as eligible applicants for loan guarantees; energy efficiency projects for reducing energy costs of large end-users developed by ECF-registered Energy Service Companies; and the terms and conditions, including loan extent, maximum repayment period, grace period, and anticipated reductions in interest rates. The annual SGF premium of **0.5%** of the guarantee offered by the SGF, credit standards for borrowers, and the loan default and recovery process are also described.

Section 7 highlights the personnel training and capacity building requirements of key stakeholder institutions to ensure efficient operations and sustainability of the facility. It also recommends norms for certifying Energy Service Companies and project developers for the program.

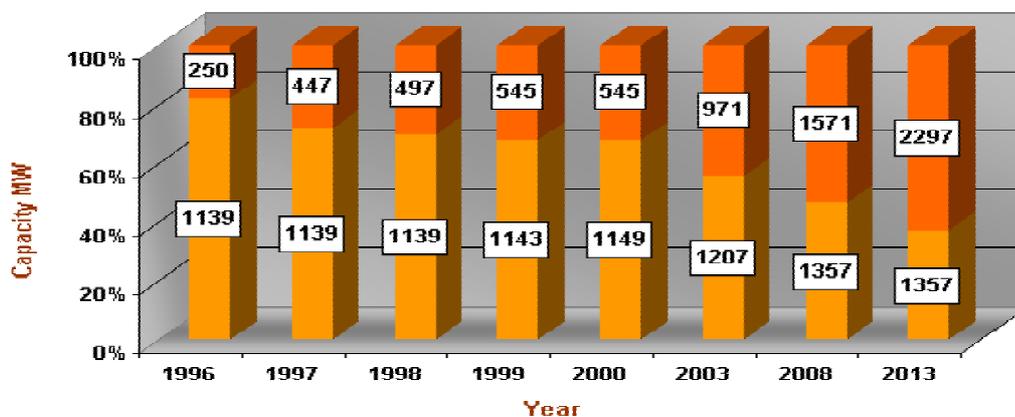
The proposed implementation schedule includes an important capacity building component before the introduction of the facility and a review process once the loan guarantee amount reaches **80%** of the initial investment. During the proposed project review process, it is recommended to study ways of enhancing the fund to include renewable projects.

### 1.1 Present Status of Energy Sector

In Sri Lanka, about **64%** of the population has access to electricity with an installed capacity of about 2,000 MW, of which around **60%** is hydropower and the rest is thermal (oil based). This heavy dependence on hydropower, with the demand for electricity increasing at around **8%** per annum, has resulted in power shortages during drought periods affecting industry and the economy as a whole<sup>1</sup>.

The electricity generating system in Sri Lanka is in transition from a predominantly hydroelectric system to a mixed hydrothermal system with private sector participation.

Figure 1.1 indicates the current and the future hydro/thermal mix in Sri Lanka<sup>2</sup>.



Source: DL Course on Energy efficiency Financing, AED/SLEMA 2004

Fig 1.1 Current and Future Hydro/Thermal Mix in Sri Lanka

The Government of Sri Lanka (GOSL) is in the process of restructuring the power sector, and it has recently enacted legislation to create a regulatory authority and unbundle the Ceylon Electricity Board (CEB) into separate generation, transmission, and distribution companies.

The Government is also encouraging investment in renewable energy projects such as, wind power and mini-hydropower generation.

With almost all economically viable hydro resources now developed, the emphasis is now on the addition of thermal power to meet the increasing demand for energy from both the domestic and industrial sectors. However, increasing electricity costs as a result of large additions of oil-based thermal generation to the electricity grid is affecting the industrial output.

<sup>1</sup> Concept for financing of Industrial Energy Efficiency/Conservation Projects: Sri Lanka, SARI/Energy June 2003

<sup>2</sup> Market Background Study for DL Course on Energy efficiency Financing, AED/SLEMA, 2004

To mitigate the impact of high electricity tariffs and the possible environmental impact from increased thermal generation, energy conservation/efficiency is promoted aggressively in Sri Lanka, with a **20-30%**<sup>3</sup> energy-saving potential in industry from cost-effective end-use improvements.

## 1.2 Energy Efficiency/Conservation Potential

The importance of energy conservation/efficiency for mitigating the impact of increasing energy costs in Sri Lanka has been recognized. Studies on various industrial sectors have shown that there is a significant potential for energy efficiency (EE) projects within these sectors.

The potential energy savings, based on a survey conducted in 2000<sup>3</sup>, in six main industry sectors are given below:

- |                        |            |
|------------------------|------------|
| ▪ Tea industry         | <b>30%</b> |
| ▪ Commercial buildings | <b>25%</b> |
| ▪ Garment industry     | <b>25%</b> |
| ▪ Hotels               | <b>30%</b> |
| ▪ Ceramic industry     | <b>20%</b> |
| ▪ Engineering          | <b>20%</b> |

The industrial sector savings correspond to an annual generation saving of Rs. 4.2 billion from an investment of Rs. 7 billion with net payback period of two years over the next five years.

## 1.3 Barriers for Energy Efficiency / Conservation

The importance of energy conservation and efficiency had been recognized in Sri Lanka, but barriers have hindered the widespread commercialization and large-scale implementation of end-use energy-efficiency improvements. The following are barriers for energy efficiency in Sri Lanka:

- Lack of awareness,
- Shortage of skilled service providers,
- Lack of financing,
- No experience with performance contracting, and
- Lack of protocols to monitor and verify savings.

In this context, an important step has been taken by the United States Agency for International Development (USAID) under the technical assistance component of the South Asian Regional Initiative for Energy (SARI/Energy) to develop mechanisms to promote end-use efficiency and conservation in industry.

## 1.4 SARI/Energy Objectives

The South Asian Regional Initiative for Energy (SARI/Energy) aims at promoting mutually beneficial energy linkages among the participating nations. A key component

<sup>3</sup> Report/Presentation - Potential for ESCOs in Sri Lanka: LTL Energy (Pvt.) Ltd, 2000 - Updated

of this is the promotion and development of Energy Service Company (ESCO) activities in the region to reduce energy costs to industry.

The main components of ESCO development activities under SARI/Energy are:

- Capacity building of ESCOs in business development and financing,
- Development of appropriate ESCO models,
- Introduction of monitoring and verification (M&V) protocols,
- Development of financing mechanisms for ESCO operations, and
- Capacity building of ESCOs in performance contracting.

### 1.5 Energy Service Companies (ESCOs)

Energy Services Companies have been established to assist end-users in the reduction of overall energy costs. They do this by providing guaranteed savings from an energy efficiency project at a customer installation at no additional cost to the customer, which benefits both the end-user and the ESCO. The guaranteed savings model is illustrated in Figure 1.2

Energy Services Companies develop and implement energy-efficiency projects that support themselves financially based upon the measured and verified savings that these projects generate. They often guarantee the savings to be realized and typically an agreed percentage of the savings is paid by the client to the ESCO to cover the cost of the services while simultaneously leading to positive cash flows for the client. This service from ESCOs is often termed “performance contracting”. Although the ESCO concept is relatively new to Sri Lanka, there are a number of successful industrial energy efficiency/conservation projects that have already been implemented.

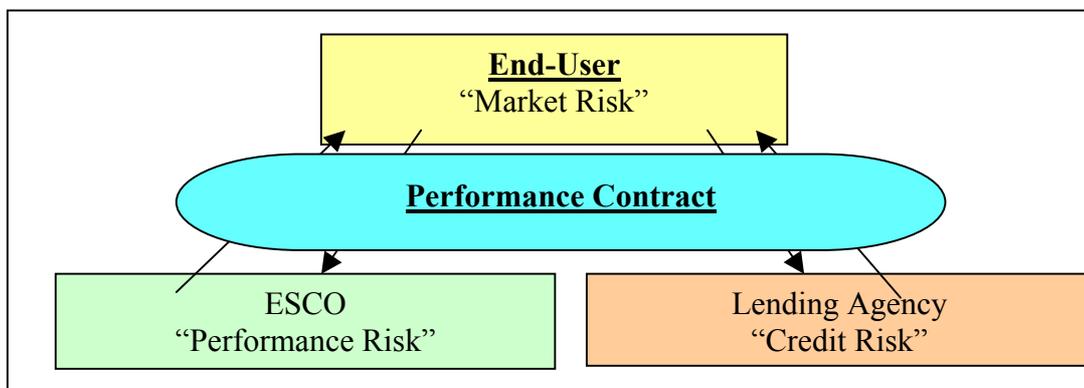


Fig 1.2 Guaranteed Savings Model (GSM)

### 1.6 Market Components

#### 1.6.1 Monitoring & Verification of Savings

Considerable opportunities exist for improving energy efficiency in every sector of the Sri Lankan economy. Actual investment being made today is only a small fraction of the total economically attractive investments. One of the barriers to increased investment is lack of consistent and objective procedures and guidelines for quantifying savings. Measurement and verification protocols developed under SARI/Energy Project

I establish a common framework and define acceptable procedures for determining savings from an energy efficiency and conservation project implemented by an ESCO<sup>4</sup>.

### 1.6.2 Performance Contracting

The guaranteed savings structure is an arrangement where an end-user makes periodic fixed debt service payments to a third-party financial institution or lender of the amount required to repay the ESCO's turnkey project cost plus the financing costs of lender. Under this approach, the ESCO guarantees that the saving from the project will be more than adequate to meet debt servicing plus any other costs, such M&V or operational and maintenance costs. If the realized savings fall short of repayment, the ESCO will pay the difference. The ESCO may also share additional benefits with the end-user. This process is commonly identified as performance contracting. Under SARI/Energy projects, performance-based contracting was introduced to ESCOs.

### 1.6.3 Project Financing

Various energy efficiency project financing approaches, including loan guarantee mechanisms, conditional loans, utility funding, interest rate buydown grants, direct loan structures, USAID development credit authority financing, and low interest loans, were analyzed in detail in developing a sustainable ESCO project financing structure for Sri Lanka, under SARI/Energy projects.

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<sup>4</sup> Monitoring & verification protocols - Sri Lanka: 2003

Under the USAID funded SARI/Energy Project – Phase 1, concepts for financing energy efficiency/conservation projects in South Asia were developed to promote investments in energy efficiency projects by overcoming one of main barriers for energy efficiency – lack of financing.

A critical examination of various approaches for financing energy efficiency projects used in several countries and an evaluation of energy efficiency funds used in Sri Lanka were carried out. The objective of this evaluation was to develop a structure for Sri Lanka that could support sustainable and replicable energy efficiency projects and at the same time catalyze increased public and private-sector financing of energy efficiency projects.

## 2.1 Worldwide Energy Efficiency Financing Mechanisms

### 2.1.1 Loan Guarantee Mechanism – Hungary<sup>5</sup>

In Hungary, the *Energy Efficiency Guarantee Program* provided Hungarian financial institutions with loan guarantees for individual loans as well as a portfolio guarantee that provided a blanket guarantee to help to facilitate small loans. This program, which was implemented by the International Finance Corporation (IFC) and the Global Environment Facility (GEF), provides an interesting example of a cooperative financing mechanism. The GEF contributed a \$5 million grant and the IFC contributing another \$8+ million in reserves. The program then used this capital to create a two-tiered Guarantee Facility Agreement with a local financial institution separated into a Transaction Guarantee and a Portfolio Guarantee.

The *Transaction Guarantee* was provided to the local financial institution for repayment of energy efficiency loans that it made to three classes of borrowers: (1) end-users who received loans directly from the financial institution; (2) leasing companies who used the loans from the financial institution to offer lease financing to end-users, and (3) ESCOs who used the loans to finance energy service agreements with end-users.

The *Portfolio Guarantee* was made to the local financial institution for small energy efficiency loans and leases to end-users. The Program provided a repayment guarantee, and co-funded a loan loss reserve, for loans comprising the portfolio.

The World Bank, through the Global Environment Facility (GEF), has supported a number of successful energy efficiency loan guarantee programs in other countries.

### 2.1.2 Loan Guarantee Mechanism – China<sup>5</sup>

In China, the *Energy Efficiency Guarantee Facility* offered co-financing for loan loss reserves with a Chinese guarantee agency that provided loans guarantees to Chinese

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<sup>5</sup> Global Environment Facility ([www.gefweb.org](http://www.gefweb.org))

financial institutions that in turn provided loans for energy efficiency projects. Under this structure, the Global Environmental Facility (GEF) offers co-financing for loan loss reserves with a local guarantee agency in China, and the GEF agrees to cover first losses under the Facility.

The local guarantee agency has a Guarantee Facility Agreement in place with a local financial institution, which makes energy efficiency project loans to three classes of borrowers as follows: leasing companies, who structure equipment lease financing to end-users; end-users; and energy management companies that finance Energy Services Agreements with end-users.

The guarantee program mechanism is used by most of the world's export credit agencies in some form or another, including the Export-Import Bank of the United States, Hermes-Germany, and Coface-France. For the fiscal year 2000, the Export-Import Bank of the United States authorized U.S. \$12.6 billion in export financing; only 8 out of 2,529 authorizations were direct loans and the remainder were either loan guarantees or insurance to banks<sup>6</sup>.

## 2.2 Conditional Loans as a Vehicle to Support ESCO Projects

A conditional loan could certainly be important for end-user customers to finance energy efficiency projects, but perhaps it could serve as an even more critical resource for thinly capitalized ESCOs that may have great potential to identify and implement successful projects. In many parts of the world currently, ESCOs do not have strong balance sheets, and hence they have inadequate ability to borrow funds to implement business solutions on a turnkey basis.

This problem can be addressed by creating a loan structure in which the energy service performance contract payments made by the customer to the ESCO are made into a *collateral control account or escrow account* within the fund that would serve to capture the payments to service the principal and interest on the fund's loan. By capturing the customer payments, the fund would then be essentially betting on the ability of the ESCO to properly perform their service under the contract.

The conditional loan could contain enhanced terms, such as longer-than-usual repayment terms or concessional interest rates, or it may be in the form of a conditional grant. SELCO-India (SI), a solar electric lighting company selling household photovoltaic systems, is a U.S. and India joint-venture company formed to sell solar home systems to rural households in Southern India. In 1996, SI received a \$150,000 conditional grant under the USAID's RECOMM project<sup>7</sup>.

## 2.3 Utility as the Main Borrower for ESCO Projects

Another international example is provided by the *National Electric Utility of Croatia* (NUEC), which essentially acts in the role of a "super ESCO." A Croatian financial institution provides loans to NUEC for energy efficiency projects with NUEC having

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<sup>6</sup> Export-Import Bank of the United States Annual Report 2000

<sup>7</sup> SELCO International

direct responsibility for debt service payments. NUEC, in turn, provides capital to energy efficiency equipment suppliers and smaller ESCOs who then provided turnkey projects and services to end-users. NUEC also provides energy efficiency project marketing, auditing, and procurement services to these same end-users. The end-users pay for the ESCO projects out of utility bill payments to NUEC.

## 2.4 Design-Build Contract Model

A simpler international example is the “design-build” contract model in Mexico in which the ESCO delivers energy efficiency equipment and warrants energy savings with the end-user customer paying the ESCO in cash. The design-build mechanism worked well for end-user customers with excess cash to invest and resulted in more than 100 projects implemented, including projects for Mexican banks Bancomer, Banamex, and Banca Serfin, as well as department stores and exporters<sup>8</sup>.

## 2.5 Interest Rate Buydown Grant

Under the *Interest Rate Buydown Grant*, the fund could significantly lower the costs of borrowing by the end-users by combining the grant with the loan guarantee provided under the sustainable guarantee facility. Using this arrangement, the participating financial institution or guaranteed lender could lower the nominal interest rate to the borrower.

The interest rate buydown grant would be important not only to overcome existing barriers and increase the focus on potential energy efficiency investment, by also serve as the primary stimulus to ultimately increase the numbers of innovative energy-efficiency loan transactions.

With projects brought about through the interest rate buydown grant mechanism, a greater level of financing and co-financing can be achieved. The basic mechanism for the interest rate buydown grant would have the fund create an interest-earning escrow account within the participating financial institution or guaranteed lender that would make up the difference between the lower rate charged to borrower and that rate that would be normally charged by the bank with fund’s repayment guarantee.

The escrow account would be drawn upon at each loan principle and interest payment by the guaranteed lender as an add-on to the lower loan interest rate. The amount of the escrow account funded by the interest rate buydown grant would be calculated on a net present value basis using the escrow account deposit interest rate as the discount rate.

For a loan guaranteed **100%** by the fund under the sustainable guarantee facility, the participating financial institution or guaranteed lender is allowed to charge a maximum interest rate of **10%**. The interest rate buy-down grant would buy down the interest rate by a maximum of **5%** and be set at a maximum of US \$20,000 per loan. The costs of the interest rate buydown grant to the fund for each loan would be lowered by the amount of the down payment by the borrowers, which should be between **10-20%**.

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<sup>8</sup> Econometry International

The interest rate buy-down grant could also be a standalone product of the fund not offered in combination with a loan guarantee. It should be noted, however, that the loan guarantee option under the sustainable guarantee facility would also serve to lower the nominal interest rates charged to the borrowers by eliminating the risk of default for the commercial bank.

Poland's National Fund for Environmental Protection and Water Management and its executing subsidiary, the Bank for Environmental Protection or BOS Bank, provide an international example of an interest rate buy-down type of mechanism. The National Fund provides financing for projects primarily in the form of "soft" loans. The National Fund is limited to a maximum support level of **70%** per project. The soft loans provide for a subsidized interest rate, which is calculated as a **20%** coefficient of the Polish inflation rate. For example, assuming an inflation rate of **30%**, the **20%** coefficient<sup>9</sup> would result in an interest rate of **6%** for zloty-based lending.

Award of a loan is conditional upon the satisfactory review of the environmental benefits of the project as well as the borrower's creditworthiness, business plan, and proposal of loan repayment security. For projects in which the amount requested exceeds US \$225 thousand, the National Fund requires that the project suppliers or executors be selected through a competitive bidding process. The National Fund works very closely with the BOS Bank in which it has a **47%** ownership share<sup>10</sup>. The BOS Bank and other Polish banks service loans granted by the National Fund.

The BOS Bank has on staff both environmental and credit officers who perform due diligence for each loan to analyze the expected environmental outcome, cost efficiency of the project, and expected repayment. The Bank's customer base is comprised of corporations (both public and private), which represent about **60%** of total lending, and municipal governments, which represent about **30%**. In accordance with Polish Central Bank regulations, the Bank limits exposure for any one transaction to a maximum **10%** of its total equity.

## 2.6 Direct Loan Structure

The Direct Loan Structure has the immediate advantage of readily available direct, fixed-interest rate funding to project borrowers at rates of interest that are likely to be lower than those offered by commercial banks. In addition, the Direct Loan Structure will likely have longer repayment terms than similar commercial financing. The Direct Loan Structure has been used to finance projects in areas unlikely to be priority-lending sectors for commercial banks. The major drawback with the Direct Loan Structure is that once the fund is fully loaned-out, no further resources are available to support additional projects. The Direct Loan Structure also requires greater administrative costs for the fund given the need for loan documentation and administration in addition to the costs of credit and project evaluation. The fund would essentially become a bank with full responsibility to properly conduct credit evaluation, prepare and process loan documentation, handle loan disbursements, take direct commercial risk, and seek to perfect liens or mortgages on equipment and property.

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<sup>9</sup> National Fund For Environmental Protection and Water Management – Operating Guidelines

<sup>10</sup> *ibid*

## 2.7 USAID Development Credit Authority

Development Credit Authority (DCA) is a market-based credit enhancement mechanism that offers a flexible and effective tool for attracting private investment and mobilizing private capital in support of development objectives. Typically **50%** principal guarantees, DCA facilities are used when USAID overseas missions decide that a credit enhancement will better serve local development interests than the more traditional grant programs.

The DCA provides loan guarantees covering up to **50%** of a lenders commercial risk on a project or portfolio of projects. Eligible borrowers may be private-sector firms, municipalities, and sub-sovereign entities if the central government owns less than **25%**; DCA cannot work with sovereign government entities. The term of the DCA guarantee may extend to 20 years; however, most guarantees have been issued for less than 10-year terms. Borrowers are not necessarily required to provide collateral for the loans; however, DCA would expect to receive **50%** of any collateral provided in the event of a loan default<sup>11</sup>.

The DCA will not provide a guarantee to other donor capital, and typically it is not interested in issuing a co-guarantee with another donor as USAID encourages private parties to put in some of their own capital at risk.

Over the past several years, USAID/Bulgaria has successfully funded two energy efficiency activities in Bulgaria, which have helped to develop a groundswell of interest in energy efficiency among Bulgarian municipalities. The municipalities have organized themselves, with USAID assistance, to form the Municipal Energy Efficiency Network (MEEN) and have linked themselves with international energy efficiency organizations in Central and Eastern Europe. Despite the enthusiasm of the municipalities and the factual evidence of successfully implemented projects with positive financial returns, commercial banks in Bulgaria are still reluctant to provide the longer term financing to municipalities necessary to fund such projects. Perception of risk, inadequate collateral on the part of municipalities, and poorly prepared projects are often cited as the reasons for this phenomenon.

The DCA has served to correct this market imperfection by providing the United Bulgarian Bank (UBB), a privately owned Bulgarian bank, with a portfolio guarantee. Through this arrangement, USAID partially guarantees a series of loans made to various municipalities and some private sector enterprises to finance revenue-generating energy efficiency projects. Through this initiative, USAID will mobilize US \$6,250,000 in local financial resources at a cost of US \$425,000 to the US Government<sup>11</sup>. Financing is complemented by technical assistance provided to municipalities under the Municipal Energy Efficiency Program (MEEN) to aid them in designing and developing bankable projects.

Since the inception of this activity in late 1999, 10 loans have been financed by UBB under the DCA guarantee amounting to about US \$1.6 million. The successful

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<sup>11</sup> USAID Office of Development Credit Authority

implementation of this activity has demonstrated that longer term project financing is indeed an attractive investment option for commercial banks in Bulgaria. The UBB has, in fact, indicated that positive experience with certain first-time borrowers has prompted it to expand its credit exposure to these entities.

## 2.8 Fund Mechanisms Used in Sri Lanka

### 2.8.1 E-Friends

The E-Friends was designed as an environmentally friendly solutions fund for industrial firms to provide Technical Assistance and low-cost Loans for waste minimization, resource recovery and savings, and pollution control and abatement. For energy efficiency, E-Friends would provide support to facilities that would save or reduce consumption of energy and save or reduce resources that produced energy; this support included electrical equipment and machinery that reduced overall consumption of energy and increased efficiency.

E-Friends was funded by the Japanese Bank for International Cooperation (JBIC) and administered by Sri Lanka's National Development Bank. Sri Lankan banks participating in E-Friends included Hatton National Bank, Commercial Bank, DFCC Bank, Sampath Bank, and Seylan Bank.

E-Friends loans offered the following conditions<sup>12</sup>:

- Loans could be obtained for up to **100%** of the cost of a project with a maximum of Rs. 50 million per enterprise as a term loan;
- If the project also resulted in increased profitability, that the loan could be obtained for a maximum **70%** of the project cost;
- The nominal interest rate would be **8.5%** (**0%** real interest rate);
- The maximum repayment period would be 10 years, inclusive of a maximum grace period of 2 years; and
- Security for the loan would normally be a mortgage over the project assets.

E-Friends offered technical assistance loans under the following conditions:

- Loans for consultant services directly related to the investigation of energy efficiency measures as well as design, supervision, installation, and commissioning of equipment would be interest-free;
- Seventy-five percent of the cost subject would be reimbursed up to a maximum of Rs. 750,000;
- The maximum repayment period would be 5 years including a 1-year grace period; and
- Loans were only available to firms that also obtained the project loan.

The major positive aspect of the E-Friends loan scheme was that it offered an attractive interest rate of **8.5%** for maximum loan terms of 10 years with 2-year grace periods. In addition, the scheme offered **100%** financing, which was a very attractive feature since most banks require **30-40%** down payment for loans.

<sup>12</sup> E-Friends-Sri Lanka Brochure

The major negatives of the E-Friends loan scheme were the delays in gaining approvals for loan applications and the fact that once the resources of the scheme were fully loaned out, the scheme finished as a source of financing for projects. Another major drawback mentioned was that the scheme normally required collateral from the borrower in the form of a mortgage over the assets.

A number of the banks consulted for this report had past experience in energy efficiency lending under the E-Friends loan scheme; however, the following drawbacks were noted:

- Documentation requirements were too complex;
- The loan approval process took too long;
- Funds disbursement took too long; and
- The bank's own retail staff was not well informed about the scheme so it was not as active as it could have been.

### 2.8.2 Power Factor Correction Loan Scheme<sup>13</sup>

The Power Factor Correction Loan Scheme (PFC Loan Scheme) was a mechanism funded by the Ceylon Electricity Board (CEB) designed to help industrial enterprises bring about corrective action to enhance the power factor in their respective facilities.

The National Development Bank and the DFCC Bank were the on-lending institutions for the PFC Loan Scheme. The funds provided by the Ceylon Electricity Board to these institutions were offered at an interest rate of **8%**, which was on-lent to customers at **12%**, with a 2-year repayment period. The grace period offered for the loan depended upon the customer; no security was required for the loan. The loan was made only after approval of the demand-side management branch of the Ceylon Electricity Board based on their evaluation of the technical feasibility of the project. The banks undertook the credit risk of lending to the customer.

The PFC Loan Scheme was succeeded by the E-Friends scheme, which offered 10-year loan terms at **8.5%** interest.

The major positives of the PFC Loan Scheme were the following:

- The scheme offered targeted financing for energy efficiency;
- The interest rate at the time was at an attractive level; and
- The scheme provided a source of funds.

The major negatives of the PFC Loan Scheme were the following:

- The repayment terms were relatively short at 2 years'
- The banks were obligated to take the credit risk of lending to the customer;
- The scheme offered finite resources in the form of funding to the banks, and thus it did not leverage additional resources for energy efficiency projects.

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<sup>13</sup> Power Factor Correction Loan Guidelines

## 2.9 Loan Guarantee Mechanisms in Sri Lanka

### 2.9.1 Credit Guarantee for SMI – Central Bank<sup>14</sup>

Between 1979 and 1991 the World Bank (WB) and the Asian Development Bank (ADB) provided Sri Lanka two credit lines for the financing of Small and Medium Industries (SMIs). The Central Bank of Sri Lanka (CBSL) offered credit guarantees on SMI loans provided by Participating Credit Institutions (PCIs), approved by the CBSL, under the WB and ADB credit lines. It was mandatory for these PCIs to participate in the credit guarantee scheme.

From 1979 to 1997, these credit lines provided loans through the PCIs to almost 16,000 small and medium-scale private enterprises. All these loans were guaranteed under the CBSL credit guarantee scheme.

According to the Development Credit Division of the CBSL, the reserves required to operate a guarantee scheme of this nature are around **10%**. The CBSL charged an annual premium of **0.5%** of the amount guaranteed or outstanding in the loan account. The amount of loan guaranteed varied from **60%** to **90%** depending on the size of the loan; the lower the loan amount, the higher the percentage of guarantee.

**Under the CBSL credit guarantee scheme, it was mandatory for the PCIs to obtain adequate collateral to cover the loan in case of default and to repay the CBSL any claims honored by them. Therefore, the PCIs considered the loan guarantee as a temporary facility provided by the CBSL until such time the loan is recovered from the defaulter. Collateral to cover the loan has been a major issue in providing loans under the CBSL credit guarantee scheme.**

Considering the high appraisal standards maintained by PCIs, the default rate of the loans guaranteed by the CBSL has been very low.

### 2.9.2 Other Guarantee Programs

The Sri Lanka Export Credit Insurance Corporation<sup>15</sup> (SLECIC) is the Government export credit insurer. Its schemes are operated on a "No loss-No profit" basis. Any surplus is invested to build a reserve for payment of claims. SLECIC was created by Act No. 15 of 1978 and commenced operation on 08 February 1979 with a paid up capital of Rs. 5.0 million contributed by the CBSL; the Insurance Corporation of Sri Lanka Ltd. has since raised its paid up capital to Rs. 30.0 million. It has built reserves for payment of future claims having paid a sum of Rs.146.4 million as claims as at end of October 1998. At present, a Government guarantee of Rs.500.0 million secures SLECIC.

Its main objectives are to issue insurance policies to exporters of goods and services against non-receipt or delayed receipt of payments resulting from commercial and non-commercial risks; to issue guarantees to banks and other financial institutions to facilitate the granting of pre-shipment and post-shipment finance; and to issue

<sup>14</sup> Credit Guarantee Scheme – Central Bank of Sri Lanka

<sup>15</sup> SLECIC Website – [www.slecic.lk](http://www.slecic.lk)

guarantees to persons or institutions abroad in connection with goods and services to any recognized authority or institution for Sri Lanka or for the due performance of any services to be rendered to such persons or institutions within or outside Sri Lanka.

## 2.10 Fund Mechanism Proposed for Sri Lanka

After a thorough evaluation of worldwide and local financing mechanisms for energy efficiency projects, a Sustainable Guarantee Facility (SGF) was proposed for Sri Lanka. The SFG concept was developed mainly to attract commercial funding for energy efficiency projects that the banks would otherwise not be likely to finance and to serve to lower the cost of financing to the borrower as an incentive to pursue energy efficiency projects.

### 2.10.1 Sustainable Guarantee Facility (SGF)

The SGF is an approach that would provide a repayment guarantee to Participating Financial Institutions (PFIs) for loans made to targeted energy efficiency projects. The main purpose of the SGF is to overcome the major barrier faced by energy efficiency projects – the lack of collateral – by providing a repayment guarantee that will act as a collateral substitute and also will serve to lower the costs of financing for borrowers.

Importantly, the SGF resources will be available in perpetuity to provide loan guarantees in accordance with the SGF's operating guidelines. Upon successful payback of a guaranteed loan, the reserves of the SGF backing the loan will be free to back new loans.

### 2.10.2 Operating Principles of the SGF

Initially, the SGF will operate in a manner in which the available financial resources would be set aside or reserved according to a certain percentage based on estimated loan losses. Using a conservative estimate based on the highest Non Performing Loan (NPL) portfolios among banks in Sri Lanka (currently **15%**), the reserve also will be set at the same percentage, allowing the SGF to support around six times the initial investment. Upon successful payback of a guaranteed loan, the reserves of the SGF backing the loan will be free to back new loans.

Given that the SGF operates on a reserve fund, the resources making up the reserve fund can earn interest by being invested in short-term investments. The important point is that the reserves in the SGF will only be used in case of a payment default by a borrower to the respective PFI.

The SGF will seek to limit such defaults by establishing prudent credit standards for the projects that it guarantees and also by certifying the service providers/developers who design and implement energy efficiency projects.

Participating Financial Institutions will be providing financial assistance to energy efficiency projects for which they will have the option of requesting repayment guarantees. These PFIs have to agree to follow the guidelines provided by the SGF for this purpose.

### 2.10.3 Development of SGF Operating Mechanism

The SGF concept developed under the SARI/Energy Project was approved by Government of Sri Lanka in January 2004. On behalf of Government of Sri Lanka, the Ministry of Power and Energy sought further technical assistance under SARI/Energy phase II to develop the operating mechanisms for the Sri Lanka Energy Conservation Fund (ECF) to invest Rs. 50 million to initiate the program.

During the development of operating guidelines, the technical assistance team also considered ways of extending the SGF to non-conventional renewable energy projects at the request of the ECF.

### 3.1 Purpose

The purpose of the SGF, acting as the primary vehicle of the ECF under the Ministry of Power and Energy, is to provide financial incentives for supporting sustainable energy efficiency and non-conventional projects aimed at increasing the productivity of energy to achieve rapid economic growth.

The SGF will act as a catalyst to channel and increase private-sector investment and financing of energy efficient and non-conventional renewable energy projects. The SGF is designed to realize increased energy capacity, without increasing the public debt burden, through enabling the financing of projects that can capture the currently untapped resources available through energy efficiency investments.

The major value offered by the SGF is that investments in energy efficiency can increase the productivity of business at little or no cost to the business given that the investment pays for itself through energy savings. The increasing productivity is the key that will allow industry to compete more effectively at home and in overseas markets. The SGF contributes directly to this objective by catalyzing investments that will reduce the cost of energy, as well as increase its efficiency, for local businesses.

### 3.2 Overview

Based on extensive consultation with stakeholders, including the ECF, banks, energy service companies, and government officials, it was determined that the ECF should use the SGF mechanism to provide a comprehensive loan repayment guarantee to selected banks lending for energy efficiency and non-conventional energy projects.

The main purposes of the SGF are to make possible bank lending for projects that the banks would otherwise probably not finance and to serve to lower the costs of financing for borrowers as an incentive to pursue energy efficient and non-conventional renewable energy projects. The most important overall reason to consider the SGF is that using this approach will substantially increase the amount of funds available for energy efficiency and non-conventional renewable energy projects. Ultimately, this will increase the number of projects thereby increasing the level of energy efficiency in Sri Lanka thereby creating economic benefits from lower energy costs as well as improve the environment through the increased productivity of energy consumed.

### 3.3 Key Stakeholders

The operational structure of the SGF includes the following institutions and their roles as key stakeholders:

- Energy Conservation Fund (ECF) – Facility manager
- Participating financial institutions (PFIs) – Project lenders
- Energy service companies (ESCOs) – Project developers
- End-users – Borrower

The SGF operation structure is illustrated in Figure 3.1

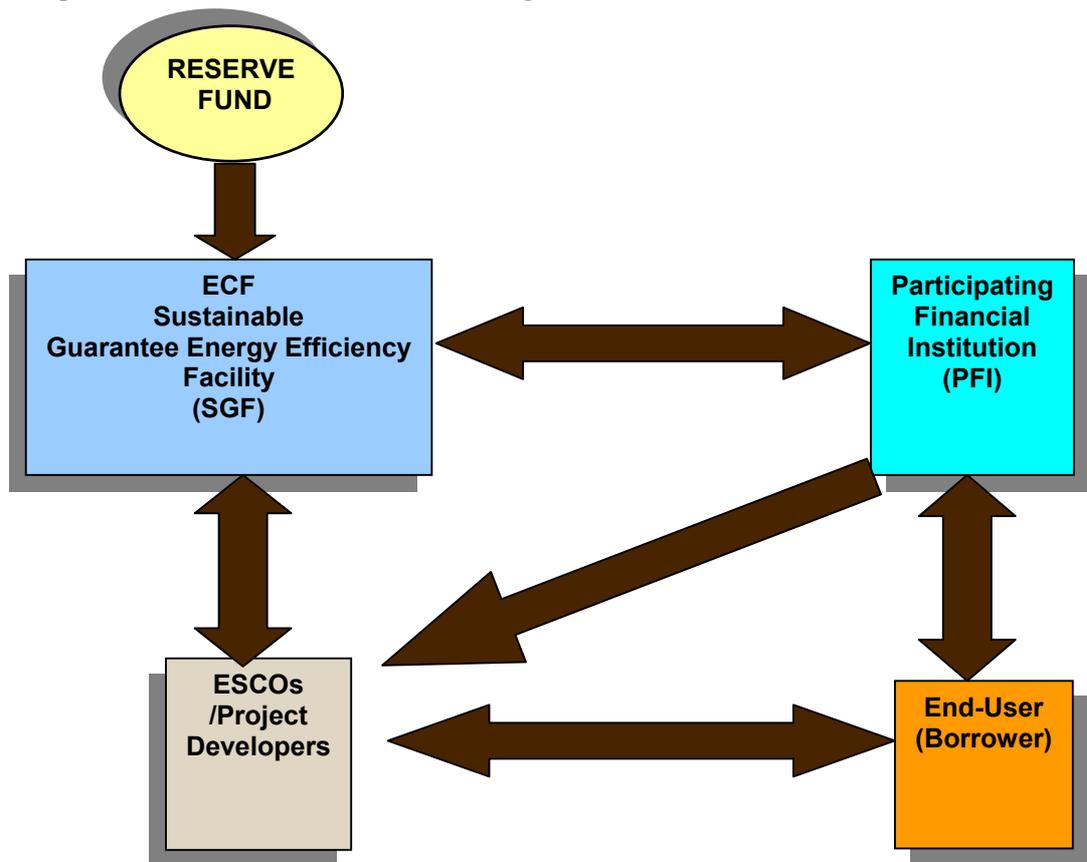


Fig 3.1: SGF operational structure

### 3.4 The Facility

The SGF is an approach that would provide repayment guarantee to PFIs for loans made to targeted energy efficiency and non-conventional renewable energy projects to overcome major barriers, such as lack of collateral and high-cost financing for borrowers. The repayment guarantee will act as a collateral substitute and reduce transaction costs to the borrower.

### 3.5 Important Features

#### 3.5.1 Resource for the Reserve Fund

The main resources of SGF reserve fund are donor funding, government/utility contributions, SGF short-term investments, and SGF premium contributions. The ECF is expected to make an initial contribution of Rs. 50 million to energy efficiency loan repayment guarantees. Further contributions are expected to guarantee non-conventional renewable energy projects – recommended after a review of the program. Given that the SGF operates as a reserve fund, the resources making up the reserve fund can earn interest by being invested in short-term investments. It is important to note that the reserves in the SGF will only be used in case of borrower repayment default to the guarantee bank.

### 3.5.2 Loan Loss Reserve and Guarantee Potentials

The basic idea behind the SGF is that the fund resources would be set aside or reserved according to a certain percentage based on estimated loan losses. Assuming a conservative estimate by establishing the reserve at **15%**, based on highest non-performing loan portfolios of local banks, the fund could support eight times the amount of energy efficiency projects. Assuming an initial fund of Rs 50 million, the SGF could support around Rs.400 million in energy efficiency investments. It should be noted that this Rs.400 million figure does not include income from the premium paid by the PFIs or the interest from SGF investments.

### 3.5.3 Guarantee Limit

The fund grants its support on the basis of an agreement concluded with the PFI financing the project after examining an application submitted by the entity according to the standard procedure specified by the fund. A major underpinning of the SGF approach is that the ECF will rely upon the credit expertise and due diligence performed by the PFIs for the successful funding and of project loans. The SGF will seek to limit such defaults by establishing prudent credit standards for the projects that it guarantees. To provide an incentive for the PFIs to act as partners with the ECF to conduct proper due diligence and risk mitigation on loans guaranteed by the SGF, the SGF would guarantee a maximum of **75%** of the outstanding loan balance on a comprehensive basis and the PFI would be responsible for the remaining **25%**.

### 3.5.4 Guarantee Premium

The SGF will charge an annual guarantee premium of **0.5%** of the loan amount outstanding, based on the rate charged by the CBSL for the credit guarantee scheme operated for the SMI sector loans provided by PFIs. A low initial premium is recommended to reduce interest rates of loans for energy efficiency projects. The SGF premium, charged annually, is mainly expected to meet the cost of facility management.

### 3.5.5 Credit Standards for Borrowers

The major implicit assumption for the realization of energy savings – and thereby the success of an energy efficiency project – is that the end-user borrower will continue to consume a certain amount of energy during the energy efficiency project period. For this assumption to hold, the end-user must continue to operate as a viable, profitable concern. The level of demand for energy, upon which the energy savings estimates will be based, will depend to a large degree on the end-user's overall level of business activity.

Based on the inherent challenge of financing energy efficiency and non-conventional energy projects, given that the security for the loan is based on the cash flows generated by the energy savings rather than existing collateral, the SGF places a major emphasis on the creditworthiness and on-going viability of the end-user borrower. To determine end-user creditworthiness, the SGF has developed credit standards as important criteria for providing its guarantee. These standards are used to enhance the probability of

repayment for loans made to energy efficiency and non-conventional energy projects, thereby preserving the integrity of ECF funds as well as its guarantee.

The fund's credit standards are designed to serve as clear, transparent criteria to qualify potential borrowers for guarantees. The credit standards and information requirements are designed to serve as clear, transparent guidelines to qualify borrowers, lessees, and end-users for fund support.

The idea is to make access to fund support relatively easy and straightforward to generate a greater number of project applications. Borrowers that meet the standards outlined below are likely to be approved in an expedited fashion. If a borrower fails to meet the standards, the fund may still approve a guarantee request provided that appropriate mitigants are offered to offset the credit risk of the borrower.

To meet the fund's credit standards, a borrower must have:

- A favorable letter of reference from their bank;
- A favorable Credit Information Bureau (CRIB) report;
- Positive operating cash flow for the latest year;
- Positive net income for the latest 2 years; and
- A debt-service-coverage ratio of 1.25. (This ratio is defined as earnings before interest, taxes, depreciation, and amortization as a percentage of interest + current maturities on long-term debt. Note that cost savings from implementing the energy efficiency project may be included in the calculation.)

Importantly, the SGF resources will be available in perpetuity to provide loan guarantees in accordance with the fund's operating guidelines. Upon successful payback of a guaranteed loan, the reserves of the SGF backing the loan will be free to back new loans. Traditional direct lending or grants approach support individual projects and thus are unavailable once spent. In summary, the SGF is a proven and cost-effective model to create a substantial increase in sustainable funding for a large numbers of energy efficiency projects.

### 3.5.6 Project Guidelines

The fund should seek to support projects through financial mechanisms aimed at funding replicable projects and reducing the costs and perceived risks for end-user energy efficiency and non-conventional energy projects.

The fund as a general principle should seek to support projects that:

- Demonstrate the economic and productivity advantages of energy efficiency investments;
- Demonstrate the technical viability of non-conventional energy systems;
- Have a high probability of replication in the future;
- Have a clear payback timeframe and are financially capable of repaying the principal and interest amount of the project loan;
- Have project borrowers that are financially capable of loan repayment; and
- Have project sponsors (ESCOs) who have the technical and managerial capabilities to successfully complete and manage the project.

Such projects would include, but not be limited to;

- air conditioning and lighting upgrades;
- replacement of lighting and air conditioning systems;
- replacement of chillers, boilers, pumps, and motors;
- installation of controls for electricity consumption;
- new building insulation; and
- cogeneration and secondary heat recovery systems.

The four key categories of stakeholders involved in the SGF process are:

1. Energy Conservation Fund (Ministry of Power and Energy)
2. Participating Financial Institutions (PFIs)
3. Energy Service Companies (ESCOs)
4. End-users (Borrower)

### 4.1 Energy Conservation Fund (ECF)

Established as a corporate body under the Ministry of Power and Energy in 1985, the ECF was created to finance, promote, and initiate activities and projects relating to the improvement of all aspects of energy demand management and conservation programs in Sri Lanka. The ECF's fund management role is discussed in detail in Section 6.

### 4.2 Participating Financial Institutions (PFIs)

All commercial and development banks that have agreed to follow the operating guidelines of the SGF are identified as Participating Financial Institutions (PFIs) for the SGF.

It is strongly recommended the number of PFIs for the initial stage of the program be limited to the institutions directly involved in the development of SGF concept. They are:

- Bank of Ceylon
- Commercial Bank
- DFCC Bank
- Hatton National Bank
- National Development Bank
- Nations Trust Bank
- Sampath Bank
- Seylan Bank

The ECF should consider the inclusion of other banks and also rural development banks after a review of the program.

### 4.3 Energy Service Company (ESCO)

An Energy Service Company (ESCO) is a performance contracting company that develops and implements energy efficiency projects on a turnkey basis, assists in obtaining finance and guarantees repayment, and shares extra benefits with the customers.

### 4.3.1 Typical ESCO Tasks

Typical ESCO tasks include the following:

- Preliminary feasibility analysis
- Detailed audits and energy studies
- Design
- Engineering
- Construction management
- Installation services
- Facilitate financing
- Operation
- Maintenance
- Performance monitoring and guarantee savings

ESCO activities in Sri Lanka are presently limited to few local organizations, such as LTL Energy (Pvt.) Ltd, Hayleys Industrial Solutions Limited, and Industrial Services Bureau of North Western Province. However, many other organizations involved in providing energy audit services to large energy users are in a position to provide energy services under a guaranteed saving mechanism.

Immediate capacity building and training requirements for these organizations to commence energy services under a guaranteed saving mechanism are listed in Section 7 of this report.

### 4.4 End-Users (Borrowers)

End-users (borrowers) are organizations that can benefit from energy efficiency and conservation projects at their installations.

#### 4.4.1 Types of End-Users (Borrowers)

- Industries
- Commercial establishments
- Large public institutions
- Hotels

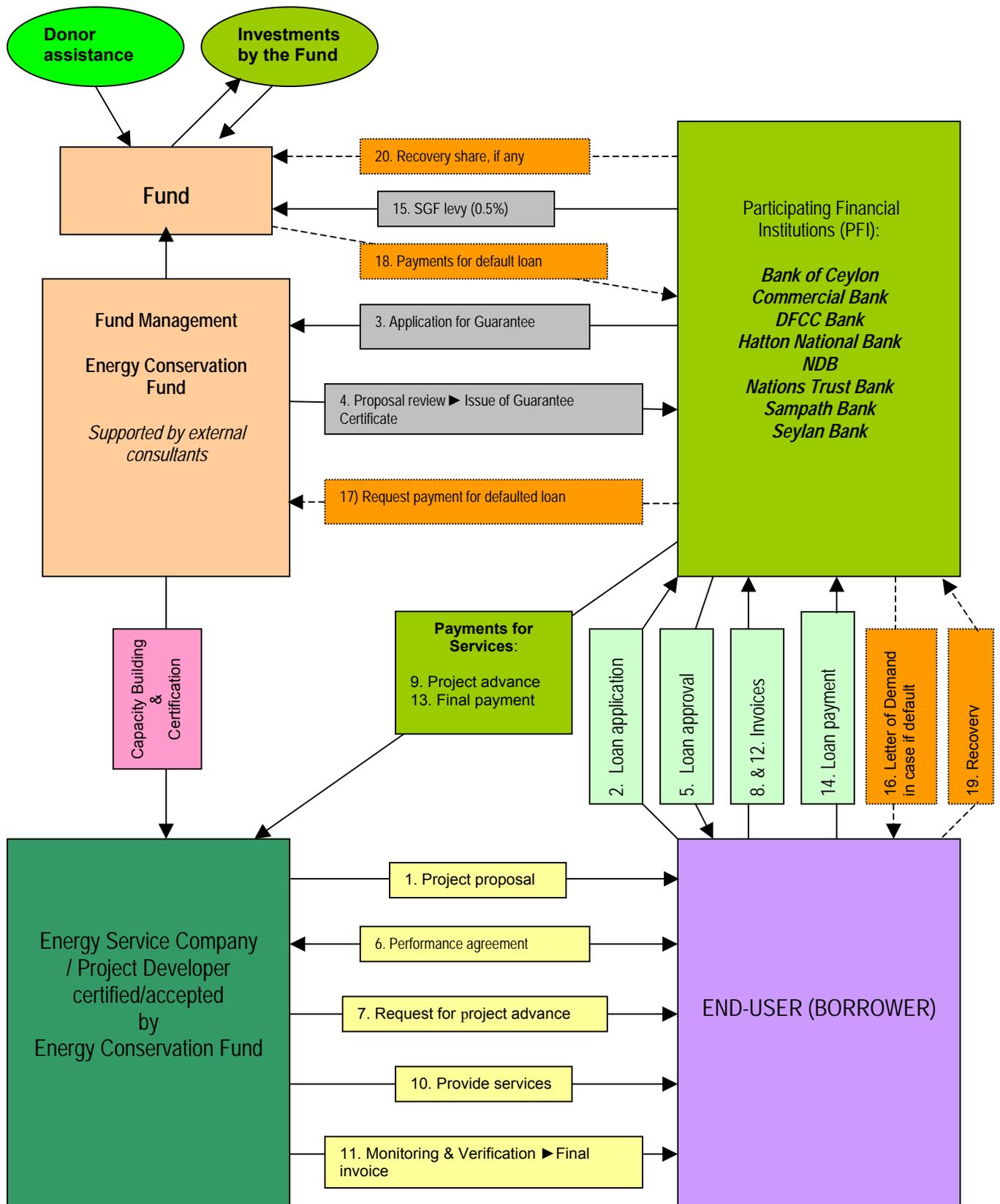


Fig 4.1: Institutional Framework – Loan Guarantee Process

## 4.5 Tasks for ECF

Major activities in fund management include (see Section 6 for details):

- Identify short-term investment opportunities for the facility;
- Seek additional funding including donor funding;
- Capacity building of services providers;
- Certification/Registration of service providers;
- Review energy efficiency proposals and issue guarantees;
- Advise the fund to honor default claims; and
- Publicize the SGF and organize awareness programs for end-users (borrowers).

### 4.5.1 Funding of SGF

Funding mechanisms for the SGF include the following, which are discussed in detail in Section 6:

- Own funds – limited to an initial deposit of Rs. 50 million;
- Donor funding – from Multilateral & Bilateral Funding Agencies;
- Investment by the ECF in short-term deposits and treasury bills; and
- SGF levy of **0.5%** to be paid by PFIs.

### 4.5.2 Capacity building of energy service providers

The ECF is expected to build capacity of existing ESCOs and other prospective organizations to have an adequate number of service providers for the program to be successful. The capacity building and training requirements are discussed in detail in Section 7.

Services of a panel of energy experts or Sri Lanka Energy Managers' Association can be utilized by the ECF for this purpose if in-house capabilities are not available or require time to build in-house capabilities.

### 4.5.3 Certification/registration of ESCOs

An important task of the ECF is to certify quality of performance of service providers by introducing an ESCO certification mechanism based on:

- Experience in similar projects;
- Company background/structure/repayment potential;
- Skills/qualifications of technical personnel;
- Background information of service providers to the ESCO; and
- Other factors to be identified by the ECF in consultation with ESCOs/service providers.

## 4.6 Tasks for PFIs

The main task of PFIs is to encourage end-users to invest in cost-effective energy efficiency projects with necessary assistance from the ECF-certified ESCOs using repayment guarantees.

In lending for energy efficiency projects, the PFIs are expected to undertake the following important tasks:

- Analysis of borrower's credit standards;
- Preliminary review of energy efficiency proposal submitted by the ESCO;
- Seek guarantee for repayment from SGF;
- Make payments to ESCOs at the request of borrowers;
- Monitor progress and repayments;
- Issue letter of demand in case of repayment default;
- Submit claims to SGF for default payments;
- Initiate recovery process in default loans; and
- Share the recovered amount with the SGF

#### 4.7 Tasks for ESCOs

The role of ESCOs is important for the program to be successful. They are expected to provide a reliable and trustworthy service to end-user (borrowers) in realizing predicted saving.

To provide these services and obtain a certification from the ECF, ESCOs are expected to build capacity within their organizations to provide complete energy services based on performance guarantees.

ECF certified ESCOs are expected to undertake following tasks:

- Build capacity to undertake projects on performance guarantees
- Seek certification from the ECF
- Identify end-users for projects
- Introduce the ESCO concept to end-users
- Market ESCO projects
- Initiate/execute performance contracts
- Undertake installation of equipment (direct or through subcontractors)
- Commission equipment
- Monitor and verify savings using M&V protocols

#### 4.8 Tasks for End-Users

End-users (borrowers) expected to benefit from lower energy costs by implementing Energy efficiency projects. However, it is important for the end-users to do the following to fully benefit from these projects.

- Invite only ECF certified ESCO to develop project proposals;
- All proposals should be based on performance contracts;
- Review proposal, performance contract and monitoring and verification mechanisms proposed;
- Monitor equipment installation;
- Witness saving monitoring and verification after installation of equipment;
- Monitor savings and repayments; and
- Enter into a maintenance agreement with the ESCO after the ESCO's obligation period is over.

## 4.9 Loan Guarantee procedure

### Step 1: **Project proposal**

To be developed by the ESCO/project developer in consultation with the end-user (borrower). A project proposal should at the minimum include the following:

- Brief description of the project with estimated total guaranteed savings and costs, payback period, warranty on equipment, payment terms, etc.;
- Details of measures proposed with estimated savings, investments, payback period for each measure;
- Project implementation schedule;
- Sample performance contract;
- Sample maintenance agreement, if necessary; and
- Financial analysis of the proposal to include a profit and loss account and a cash flow statement for the project.

ESCOs are expected to submit above in the format developed for this purpose.

### Step 2: **Loan application**

Loan application will be forwarded by the end-user (borrower) to a PFI registered with the ECF to obtain a loan. One purpose of the loan guarantee scheme is to encourage PFIs to provide loans for energy efficiency projects at a rate of interest lower than the normal lending rates by reducing the PFI's loan repayment risk. Therefore, the borrower or the ESCO is expected to check the prevailing interest rates and request a reduction from the PFI, in view of the loan guarantee to be offered by the SGF.

Loan application should accompany a project proposal developed only by an ESCO registered and certified by the ECF and include a project proposal with a financial analysis of the project as discussed above.

### Step 3: **Application for loan guarantee**

Application for loan guarantee should be made by the PFI after a careful evaluation of credit standards of the end-user (borrower) and certified as specified in the operating guidelines of the SGF.

### Step 4: **Review proposal and issue certificate of guarantee**

The fund manager (ECF) will review the application for guarantee and issue a certificate of guarantee to the PFI. The certificate of guarantee will cover the payback period plus 12 months.

### Step 5: **Loan approval**

Once the PFI receives the certificate of guarantee from the SGF, it should execute a loan agreement with the end-user and request the end-user (borrower) to proceed with the project by signing a performance contract with the ESCO.

- Step 6: Performance agreement**  
End-user (borrower) will enter into a performance agreement with the ESCO to guarantee savings during the payback period (plus 12 months) indicated by the ESCO in the proposal and if necessary a maintenance agreement if the loan repayment period exceeds the payback period plus 12 months.
- Step 7: Advance payment**  
Service provider will request a project advance immediately after the signing of the performance contract. An advance payment, if requested by the ESCO, should be limited to **70%** of total project cost.
- Step 8/9: Payment of project advance**  
Project advance will be made directly to the ESCO at the request of the end-user (borrower) immediately after the submission of signed performance contract and the project advance invoice.
- Step 10: Services**  
Installation of equipment will be undertaken by the ESCO and/or subcontractor to the service provider according to the implementation schedule forwarded by the ESCO with the proposal. Any changes to the original implementation schedule should be carried out before the signing of the performance contract.
- Step 11: Monitoring and verification of savings**  
Monitoring and verification of saving will be undertaken according to the protocols specified in the performance agreement after the completion of the project in the presence of end-user (borrower) or nominated representative of the end-user (borrower). After the savings are verified, ESCO will request for final payment and also agree on a saving monitoring methodology for the saving guarantee period.
- Steps 12/13: Final payment**  
PFI will make the final payment to the ESCO at the request of the end-user (borrower) and on production of a certificate of saving, approved by the end-user (borrower).
- Step 14: Loan repayment**  
Monthly loan repayment (principle + interest) will commence immediately after the project is commissioned. Grace period will be from the date of release of advance payment to the project commissioning date.
- Step 15: SGF levy**  
A levy of **0.5%** of the amount guaranteed or outstanding in the loan account will be paid to the SGF by the PFI.

### 4.9.1 Loan Default

In case of a loan default, the SGF expects the PFI to follow the procedure listed below (details of the procedure are given in Section 8 of the Operating Guidelines).

**Step 16: Letter of demand**

A letter of demand will be issued by the PFI if the end-user (borrower) defaults on three consecutive monthly payments (principle + interest). PFI must also notify the SGF in writing of any end-user (borrower) delinquency or payment failure.

**Step 17: Request for payment for a loan default**

After completion of above to the satisfaction of the SGF, PFI should request for payment for default amount, as specified in the operating guidelines.

**Step 18: Payment for default loans**

Payment for default loan will be made by the SGF to the PFI after reviewing the necessary steps taken by the PFI to recover the loan.

**Step 19/20: Recovery**

SGF expects PFI to pursue all available options to recover entire or a part of the due amount (principle + interest) in case of a default and share the recovered amount with the SGF in the proportion of an amount equivalent to the percentage of the amount paid by the SGF (refer the Operating Guidelines for details)

The operating guidelines provide guidance to SGF staff as well as participating bank staff on the policies and procedures for considering loan guarantees under SGF.

### 5.1 Eligible Applicants

The SGF's mission is to provide loan guarantees for energy efficiency improvement projects. The SGF seeks to act as a catalyst to increase financing of such projects. In this regard, the SGF welcomes applications for loans for energy efficiency improvement projects implemented by industrial enterprises, service providers, and project developers acceptable to the PFIs.

### 5.2 Eligible Energy Efficiency Improvement Projects

In accordance with its Operating Guidelines, the SGF as a general principle seeks to support projects that have a payback period of less than five years.

#### 5.2.1 Type of Projects

Acceptable projects are those that:

- Demonstrate the economic and productivity advantages of energy efficiency investments;
- Demonstrate the technical viability of energy efficiency systems;
- Have a high probability of replication in the future;
- Use technology that is proven in terms of its feasibility and effectiveness;
- Have a clear payback timeframe and are financially capable of repaying the principal and interest amount of the project loan.

#### 5.2.2 Examples of Eligible Projects

The SGF supports loan guarantees for projects in which the primary purpose must be energy savings and conservation. Such projects would include, but not be limited to: motor and drive efficiency controls, lighting efficiency control, power factor correction, variable speed drives, chiller improvements, boiler improvements, air, water and steam distributaries systems, thermal energy recovery, cogeneration, and process improvements.

### 5.3 Terms and Conditions for Loan Guarantee

The terms and conditions for the loans guaranteed under the SGF are as follows:

#### 5.3.1 Extent

The total guarantee from the SGF for a particular project will not exceed **75%** of the total loan offered. However, the maximum guarantee per project is limited to Rs 10.0 million; there is no minimum guarantee size.

### 5.3.2 Repayment Period and Maximum Guarantee Period

Normally the loan repayment period will be the project payback period guaranteed by the ESCO plus one year. However, the maximum repayment period will be limited to 6 years.

### 5.3.3 Grace Period

Grace period would normally be from the time of release of the advance or first installment of the loan up to the time of commissioning of the project.

### 5.3.4 Interest Rates for Guaranteed Loans

Interest rates are to be decided by the PFI. However, SGF expects a reduction of the interest rate taking into consideration the provision of a below market guarantee fee (at **0.5%**) for the guaranteed loan, which should result in a considerable reduction in the cost of funds (with low risk factor) available for energy efficiency projects.

### 5.3.5 Payment of Premium

An annual premium for the guarantee is at the rate of **0.5 %** of the amount guaranteed or outstanding in the loan account. The extent of guarantee will continue to be the percentage of guarantee determined for the loan at the time of issuing the guarantee cover. The premium is payable annually.

### 5.3.6 Guarantee Cover

The guarantee cover would become effective on the date of disbursement of the first installment of the loan and when the guarantee premium due thereon is paid to the SGF before the expiry of 30 days from the date of disbursement of the first installment of the loan, or from the date of issue of the guarantee by the SGF whichever occurs later.

## 5.4 Loan Guarantee Application Procedure

5.4.1 Given that the majority of SGF's resources will be focused on loan guarantees for participating banks, the application for guarantee relies to a large extent on the participating banks due diligence in analyzing and providing the required credit information and supporting information. In this regard, the following minimum information requirements listed on the application are designed to demonstrate the borrowers' ability and willingness to repay the loan for energy efficiency projects.

### 5.4.2 Information Required for the Processing of the Application

- An application for SGF guarantee should include (as per the attached format) the description of the energy efficiency improvements, as well as the borrower's creditworthiness.
- The PFI should certify, through declaration of certification, that it has performed reasonable due diligence in providing the information included in its application.

- The PFI must provide a copy of a certificate of insurance that evidences that the borrower has property and casualty insurance in force.
- The loan documentation between the PFI and the borrower, the contract between borrower and the ESCO together with the performance guarantees offered, along with invoices to evidence purchase of the equipment and services provided under the loan should be forwarded to the SGF.
- The PFI should be satisfied with the contract executed between the contractor (an ESCO certified by the ECF/SGF) and the borrower.
- Once all the documents are in order and the application is accepted, the SGF will issue to the PFI a Guarantee Cover Note to cover the loan for its duration of the loan, within 15 working days.
- Yearly reports signed by both the ESCO and borrower verifying the status of the project in terms of its effectiveness at reducing energy consumption should be forwarded to the SGF.
- The PFI for the purpose of inspecting the project, if the necessity arises, should in its agreements with the borrower obtain the necessary rights for itself, the SGF and the representative of the ECF to enter upon and inspect the premises where project is implemented from the proceeds of the loan for which the guarantee was obtained.
- The ECF should be notified immediately on release of the first and/or final installment of the loan guaranteed by the PFI.

## 5.5 Declaration and Undertaking by the PFI

### 5.5.1 The PFI Should Accept and Agree that:

- The loan for which the guarantee is sought will be utilized only for the purpose for which the loan is granted;
- The loan will be released after having satisfied its proper end-use of funds. Any deviations will be duly informed to the SGF;
- The PFI will exercise all reasonable care and prudence in granting the loan to borrowers; and
- If the borrower at any time fails to repay the loan on the due date, the PFI shall take all steps which may be necessary to effect recoveries from the borrowers.

### 5.5.2 PFI Should Undertake to Meet Credit Standards

The SGF's credit standards are designed to serve as clear, transparent criteria to qualify potential borrowers for guarantees. Borrowers that meet the fund's minimum standards outlined below are likely to be approved in an expedited fashion. If a borrower fails to meet the Standards, the fund may still approve a guarantee request provided that appropriate mitigants are offered to offset the credit risk of the borrower. A borrower must have:

- A favorable letter of reference from their bank and a clean CRIB report;
- A positive operating cash flow for the latest year;
- A positive net income for the latest 2 years; and
- A debt-service-coverage ratio of 1.25. This ratio is defined as earnings before interest, taxes, depreciation and amortization as a percentage of interest + current maturities on long-term debt. *Please note that cost savings from implementing the energy efficiency project may be included in the calculation.*

## 5.6 Issuance of Guarantee

The ECF will issue its guarantee to the participating bank upon satisfactory review of the application, which includes the credit information, supporting information, and declaration and undertaking by the participating bank as stated above.

## 5.7 Procedure for Claiming SGF's Guarantee

### 5.7.1 PFI Must Inform SGF

If a borrower defaults on three consecutive monthly principal *and* interest payments, the PFI must inform the SGF and begin proceedings to pursue a judgment against the borrower. However, if PFI decides to claim the guarantee, the PFI must submit the claim to the SGF after serving the demand notice on the borrower, not later than one month from the end of the three-month default period. The demand notice for this purpose will be the letter of demand served on the borrower, by the legal officer of the PFI.

### 5.7.2 Claim Limited to Guarantee Extent

The claim under the guarantee will be limited to the extent of the guarantee on the principal amount in default and interest accruals thereon for a period not exceeding four months and the time taken for the SGF to process the application and honor the claim. The extent of the guarantee will be the same percentage of guarantee determined for the loan at the time of issuing the guarantee cover note. The exposure in the event of a default will be shared *pari passu* between the SGF and the originating PFI as per the initial ratio of 75:25

### 5.7.3 60-Day Claim Period

ECF/SGF will take all necessary steps to honor the guarantee payment within 60 days from the date of receipt of the claim together with all required documents required.

## 5.8 Definition of Default

Borrower default is defined as the borrower's failure to make three consecutive principal *and* interest payments on a loan based on monthly repayments.

## 5.9 Notice of Borrower Delinquency

On observing the first signs of borrower delinquency, the PFI, must notify the SGF in writing their observations and any actions they propose to take.

## 5.10 Rescheduling of Borrower Payment Terms

### 5.10.1 Explore Rescheduling

Prior to submitting a claim for payment under the SGF, the PFI must explore the possibility of rescheduling the borrower's loan to enable the loan to be paid. Any consideration of rescheduling must be forwarded to SGF supported by a written request from the borrower and accompanied by an explanation and appropriate supporting documentation indicating how the additional time will enable the borrower to repay the loan.

### 5.10.2 Two-Week Notification

SGF will convey its decision within two weeks from the date of receipt of the application for rescheduling.

## 5.11 Recovery

### 5.11.1 Prompt Action

It is the duty of the PFI to take prompt-and effective action for the recovery of any overdue amount in all ways open to it, even after the settlement of a claim under the guarantee and keep the SGF informed of the action taken and the developments from time to time.

## 5.12 Division of Recovery

All amounts recovered after payment of a claim should be shared between the SGF and the PFI in the proportion of an amount equivalent to the percentage of the amount paid by the SGF.

## 5.13 Loan Guarantee Termination Provisions

SGF may terminate a Loan Guarantee agreement in the following cases:

- Borrower did not begin the project during the agreed-upon implementation period or gave up the implementation of the project for which the loan or loan guarantee was granted;
- Loan or loan guarantee was not used in accordance with the designation defined in the loan or loan guarantee agreement;
- Borrower does not fulfill other conditions established in the loan or loan guarantee agreement;
- Annual premium is not received before the expiry of 30 days from the due date;
- Loan for which the guarantee was sought has not been utilized for the purpose for which the loan was granted

#### 5.14 Supplementary Provisions

In respect of any matter not specifically provided for in the scheme, the SGF/ECF would make such supplementary or additional provisions as may be necessary for the purpose of this scheme.

The SGF management approach and structure have been designed to;

1. Help provide a sustainable source of collateral to energy efficiency project promoters to facilitate affordable lending to this asset class; and
2. Enable lenders reduce their transaction costs by inculcating a participatory approach on part of the SGF with PFIs by streamlining the loan-approval and due-diligence process.

The SGF management unit, therefore, will comprise of a mix of professionals who have experience in both the technical and economic aspects of energy efficiency projects. In this section, a possible structure for the SGF management itself is provided and the specific role that the SGF could perform is more clearly defined.

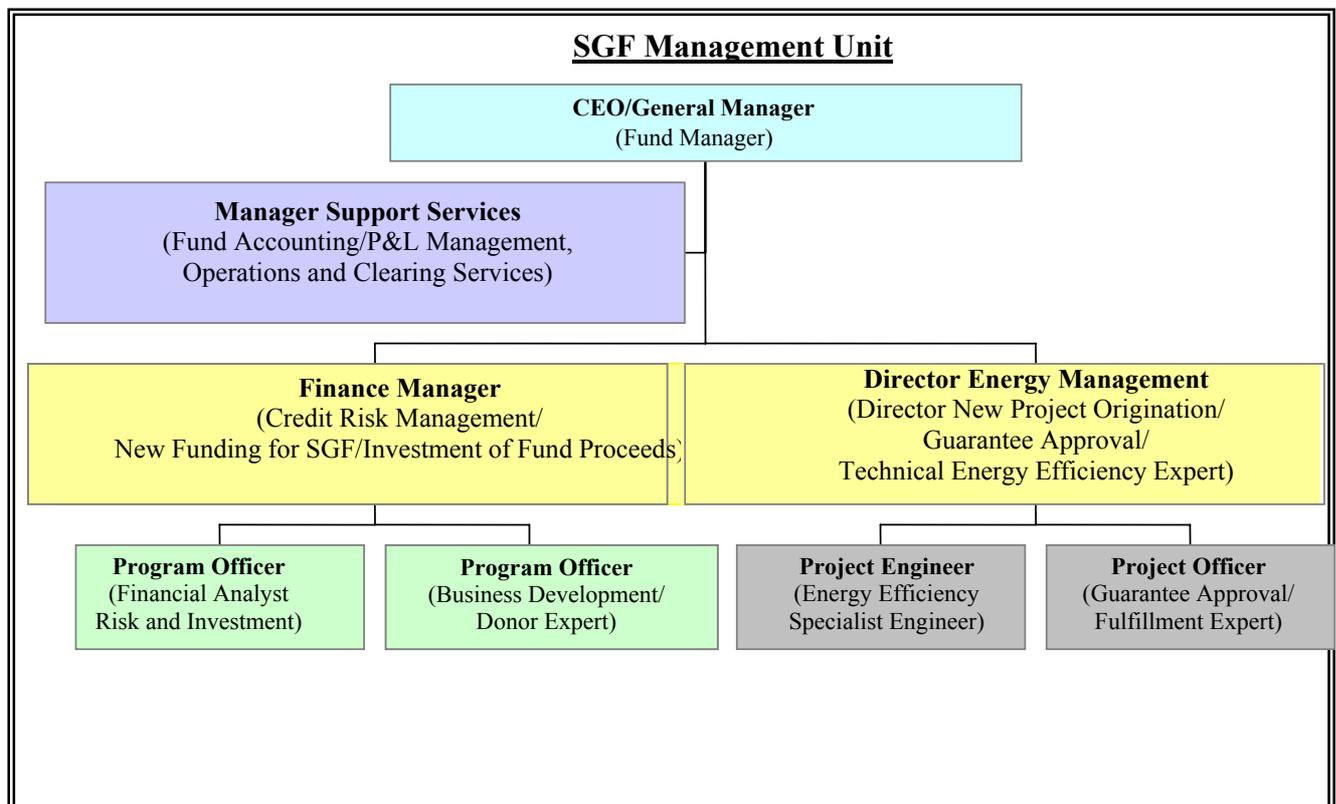


Fig 6.1: Proposed Structure of the SGF

## 6.1 Roles and Responsibilities of SGF Staff

### 6.1.1 Tier 1 –General Manager/CEO, Finance Manager, Director Energy Management

In the structure given in Figure 6.1, the General Manager/CEO who will act as the SGF Fund Manager has ultimate responsibility for the functioning of the SGF. Reporting directly to him are the Finance Manager and the Director of Energy Management. The Finance Manager will function akin to the credit committee of a bank and will be responsible for risk management of the SGF, the obtaining of additional money from donor agencies/other sources to capitalize the guarantee fund and for the investment of the guarantee fund assets in risk-free liquid securities growing at the risk free rate of interest. The Director of Energy Management, on the other hand, will be responsible for the client-side activities of the SGF and will work with the PFIs to identify potential projects, work with the PFI to ensure the highest likelihood of approval of the projects for guarantee by the Finance Manager and ensure that the projects the PFIs bring to the SGF meet agreed upon technical standards and all the specified debt service, cash flow and other financial covenants<sup>16</sup>. In addition, assisting the General Manager/CEO will be an individual responsible for the P&L and the clearing operations of the SGF.

### 6.1.2 Tier 2 – Project Engineers and Program Officers reporting to the Finance Manager and Director Energy Management

At the next tier of the SGF, there are two staff each reporting to the Finance Manager and the Director of Energy Management. The staff reporting to the Finance Manager will consist of two Program officers assuming the roles of a Financial Analyst and a Business Development Analyst who has familiarity with the donor community. They will both be junior to mid-level professionals. The Financial Analyst will be responsible for helping the Finance Manager in managing the risk of the guarantee portfolio. To that end, he will be responsible for determining the potential losses of the SGF based on the exposure created by the current portfolio of guarantees and help in prescribing solutions to ensure that the level of potential losses is kept at a minimum. The Financial Analyst will also be responsible for raising a flag if he believes that the loss level being created by a proposed guarantee is not in line with the SGF Fund's appetite for risk. The Business Development Analyst who will also report to the Finance Manager and will be responsible for marketing the SGF, its risk management methodology, and its success in originating new projects and minimizing potential losses to the donor communities and other potential funders of the SGF with the objective of raising the capital base of the SGF so that it can guarantee the largest number of attractive energy efficiency projects.

The staff reporting to the Director of Energy Management will consist of a Project Engineer (Energy Efficiency Specialist Engineer) and a Program Officer (Guarantee Approval/Fulfillment Expert). The Energy Efficiency Specialist Engineer will assist both the Director of Energy Management and the PFIs in their due diligence of end-use energy efficiency project implementers requesting guarantees from the SGF. The Energy Efficiency expert will ensure that only the projects of the highest standard and potential for success are brought before the PFI for a lengthy appraisal and the Finance

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<sup>16</sup> The Flow Chart at the end of the chapter illustrates the functioning of the SGF in the guarantee approval process. The same methodology will be used to honor claims made by PFIs to the SGF.

Manager of the SGF itself. The objective of the SGF in doing this is to reduce the transaction costs of the PFI by performing value-added technical due-diligence services. In addition, there is the Guarantee Approval/Fulfillment expert. This expert will ensure that the project being brought forward to the SGF meets all the prescribed financial covenants that are required for a project to enter the SGF guarantee/PFI loan approval process. As mentioned before this will include but not be limited to debt service coverage ratio, loan-to-value ratios, pro-forma cash-flow forecasts, and any other type of financial analysis that may be relevant to the particular project.

These different units working together with the fullest co-operation will ensure the sustainability of the SGF and the promotion of investments in energy efficiency by providing collateral guarantees for the best projects and reducing/streamlining fulfillment processes and therefore transaction costs of the PFIs. In the next section, some of the activities that can be performed by the SGF are described.

## **6.2 Functions of the SGF**

In this section, the functions that the SGF will perform in providing guarantees for energy efficiency projects while at the same time managing its risk capital are described. Generally, the operational functions of the SGF will fall under the purview of the Finance Manager or the Director of Energy Management with the overall authority residing with the General Manager/CEO. The operational functions to be performed by both of the line managers are described in Sections 6.3 through 6.5 in more detail.

### **6.3 Finance Manager's Unit**

As mentioned earlier, the Finance Manager and his unit will function akin to the credit committee of a bank and will be responsible for risk management of the SGF, the obtaining of additional money from donor agencies/other sources to capitalize the guarantee fund, and for the investment of the guarantee fund assets in risk-free liquid securities growing at the risk free rate of interest. The following items illustrate some of the functions that the Finance Manager's unit can perform.

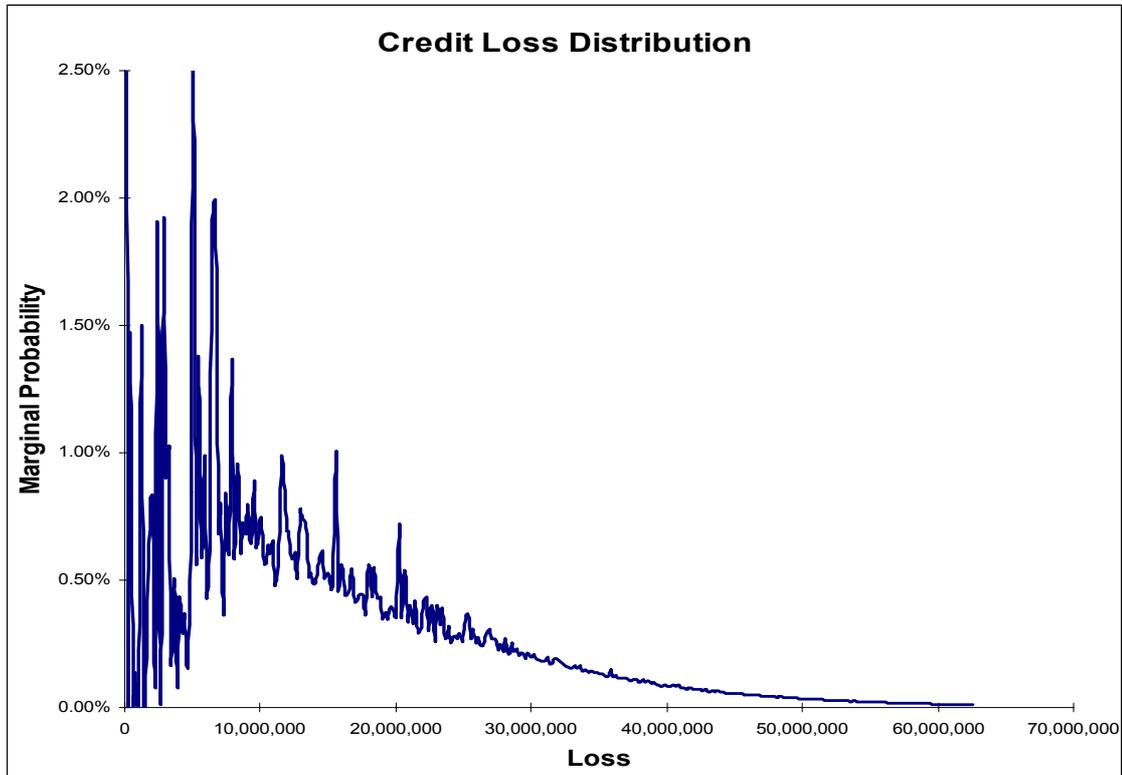
#### **6.3.1 Investment of available SGF Funds**

The initial capital used to capitalize the SGF will be deposited in a highly liquid risk-free investment and invested at the risk free rate in Sri Lanka. This will most likely be in a sovereign Treasury security issued by the Government of Sri Lanka. It should be noted that the present value of the security would be the same as its value two years from now since it is invested at the risk-free rate.

#### **6.3.2 Sustainability and the Calculation of Potential Losses and Estimation of Loan Loss Reserves**

The SGF will attempt to establish a robust and user-friendly yet sophisticated economic model to calculate the expected losses that can arise from the portfolio of projects it has guaranteed. Given the level of losses, the Finance Manager of the SGF can then take steps to dynamically manage the risk exposure of the SGF by revolving credits into and out of the guarantee pool and by accepting and rejecting projects for guarantees based

on the agreed upon loan loss levels of the pool. Provided below is an example of a loss simulation provided by CSFB's (Credit Suisse First Boston) CreditRisk+ model<sup>17</sup>, which takes the mean historical default rate of each obligor and the standard deviation of that rate as inputs and generates a distribution of losses as its output. It is important to state at the outset that the development of this type of sophisticated risk management capacity within the SGF may take some time but it is the direction in which the risk



management aspect of the SGF must evolve.

Fig 6.2: Credit Loss Distribution

### 6.3.3 Sustainability of the SGF

The purpose of calculating the potential losses of the SGF is to ensure that the risk exposure resulting from the portfolio of guarantees of the SGF is maintained at a minimal level. A model such as CreditRisk+ can be used in concert with an existing limit based approach to calculate loss reserves and to help dynamically manage the level of losses of the portfolio. This will ensure the sustainability of the SGF in terms of facilitating investment in energy efficiency projects over a lengthy period of time and also will be a key factor in attracting funds from other donor agencies and growing the initial SGF capitalization.

In addition, at the discretion of the ECF and Senior Staff of the SGF, part of the proceeds from the payment of premium for the guarantee and the interest received from the risk-free investment can be paid out for the administration of the fund itself or as

<sup>17</sup> A Poisson Distribution is the building block of *CreditRisk+* which is based on an actuarial approach

and is given by the function  $f(x) = \frac{\mu^x e^{-\mu}}{x!}$  where  $\mu$  is the mean of defaults over a historical time frame

and  $x$  is a specified number of defaults

bonuses. It is important at the outset, however, to take a policy decision whether to set aside these proceeds to fund future guarantees and as a loan loss reserve or to use them for administrative costs. Arguably, saving these proceeds in a loss reserve account to cover potential losses reserve account will also ensure the sustainability of the fund to guarantee projects in real terms well into the future.

#### **6.3.4 Maintenance of detailed Dedicated Database of Loan Guarantees issued, any defaults, and claims paid**

To obtain a history of the repayment behavior of energy efficiency loan borrowers, the risk management unit of the SGF must maintain detailed records of the payment characteristics of all the loans issued and guarantees made in a centralized database. This data must include the consolidated historical record of defaults of the loans issued and the recovery rates in the event of default. In addition, to facilitate a traditional limit-based approach used in making the loans and managing credit risk, the following information should also be maintained by the SGF:

1. Details of end-user, PFI, ESCO;
2. Extent of guarantee for individual loans and total committed;
3. Details of claims, amount paid, and total;
4. Industrial sector classification of loans; and
5. Size classification of loans.

#### **6.3.5 Furnish ECF with progress reports and the P&L statements of the SGF**

The ECF will receive regular progress reports from the SGF regarding its exposure, the amount of expected losses and the amount of reserve capital available with the SGF to cover the losses associated with the projects it has guaranteed. In addition, the SGF will also furnish to the ECF information on its own expenditures incurred in its regular line of business.

### **6.4 Director of Energy Management's Unit**

The Director of Energy Management's Unit will be responsible for the client activities of the SGF and will work closely with the PFIs to identify potential projects and to ensure that the projects the PFIs bring to the SGF meet agreed upon technical standards and all the specified debt service, cash flow, and other financial covenants. The following section refers to some of these specific tasks and responsibilities.

#### **6.4.1 Focal point for end-users, ESCOs, PFIs, and other related agencies on energy related matters**

On the technical side, under the guidance of the Director of Energy Management, the SGF will serve as a central point for the different stakeholders in the proposed energy efficiency financings to discuss their grievances and share the experience they have acquired in the course of the implementation of the energy efficiency projects and as a source of empirical information for new entrants to the market. Sections 6.4.2 and 6.4.3 further elaborate upon this approach.

#### 6.4.2 Organization of capacity building activities for PFIs and ESCOs

The SGF will organize capacity building initiatives for the PFIs and ESCOs with respect to the energy efficiency asset class of loans. These initiatives will extend to, but not be limited to, training the staff of ESCOs, PFIs, and the borrower implementing the project in performing due-diligence and appraisal of proposed projects, the monitoring of existing projects, and the dissemination of best practices and lessons learnt to avoid repetition of flaws that can be easily corrected. Capacity-building initiatives are discussed in detailed in Section 7 of this report.

#### 6.4.3 Certification/Registration of ESCOs by the SGF

The Director Energy Management of the SGF will undertake the certification/registration of ESCOs based on similar project experience, company background, and skill-levels-value added services provided by the employees. It is intended that in doing the above, the SGF will streamline the due-diligence process for PFIs and thereby succeed in considerably lowering their transaction costs. This can be viewed analogously to ratings services provided by accredited rating-agencies, e.g., Standard and Poor's and Moody's in rating issuers and their debt issuances.

#### 6.4.4 Marketing and Awareness programs for New Entrants in the Energy Efficiency Field

In co-operation with the ECF, the SGF will conduct programs to market the benefits of energy efficiency projects to the different stakeholders involved in the implementation of these projects in Sri Lanka. The actual successes in the saving of energy consumption by SGF guaranteed projects aggressively marketed can educate new entrants to the energy efficiency market and give them additional confidence to successfully undertake these projects.

#### 6.4.5 Responsibility for the processing of applications received from the PFIs for the Loan guarantees

As mentioned earlier, the Director, Energy Management and his staff will be responsible for dealing with the client – the applicants for the SGF guarantee. Based on the technical standards of the project, the Director of Energy Management will submit the project to the Finance Manager for final approval. Based on its contribution to the overall risk of the portfolio, the Finance Manager will make a decision as to whether the project adds value to the activities of the SGF, while at the same time preserving the principal of the SGF. In the event that there is a conflict between the Directors regarding the approval a project, the ultimate authority will rest with the SGF fund manager to approve or disapprove the project<sup>18</sup>.

#### 6.4.6 Maintenance of a database of registered experts in various fields of energy

An additional administrative function of the SGF will be to maintain a database of experts in the energy efficiency space who can provide value-added services and insight to project implementers and PFIs as the need arises.

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<sup>18</sup> Please refer to the flow chart diagram on the SGF guarantee approval process for details.

### **6.4.7 Assistance to PFIs in the identification of energy efficiency projects**

As mentioned in the previous section, an important role of the Director of Energy Management will be to originate and identify new projects for the SGF. In this regard, the Director of Energy Management will work pro-actively with the PFIs and the ESCOs in identifying suitable candidates for initiating energy efficiency project loans and guarantees.

## **6.5 General Manager/CEO and Operations**

The General Manager/CEO and the Manager of Support Services comprise the remaining staff of the SGF. Their roles and responsibilities are described briefly in this section and are illustrated in Figure 6.3.

### **6.5.1 Marketing of successes of SGF to various donor agencies for additional funds for the SGF**

The General Manager/CEO, the Finance Manager of the SGF, and the other members of the SGF when required will be required to market the success of the SGF in (1) funding profitable projects that have helped in significantly reducing energy costs of end users and (2) prudently managing risk resulting from the energy efficiency exposures with the aim of preserving the principal base of the SGF; with the aim of attracting new capital into the SGF. It will be the SGF's aim to build on initial successes to guarantee and finance the largest number of viable energy efficiency projects that can be implemented.

### **6.5.2 Update/modification of operating procedures of the SGF as required**

The General Manager/CEO of SGF will have the authority and should maintain flexibility to modify the operating procedures of the SGF based upon feedback received from the various stakeholders involved in the implementation of the energy efficiency projects. In that regard, it will be essential to establish an interactive and iterative process with an end goal being that of streamlining the loan approval and guarantee process so that collateral can be provided to project implementers and so that bank transaction fees can be reduced to a minimum efficient level.

### **6.5.3 Visit projects funded by the PFIs**

An important aspect of the monitoring of existing projects guaranteed by the SGF will be the adoption of a hands-on approach in the project implementation process. In that regard, the General Manager/CEO of the ECF will maintain the right or authorize selected members of the ECF to regularly visit guaranteed projects to add value in terms of its own technical insight and to learn from the empirical experiences of project implementers. This type of experiential process will add significant value to the SGF and its projects.

6.5.4 Maintain records and accounts of SGF income and expenditures

On the operations side, the Manager Support Services of the SGF will maintain records to reflect its daily expenditures incurred in its line of business and will also maintain records to reflect its exposure with regard to the guarantees it has made versus the entire amount of reserve capital available. He will also be responsible for all clearing services in terms of physical delivery of the guarantee claimed by the PFIs.

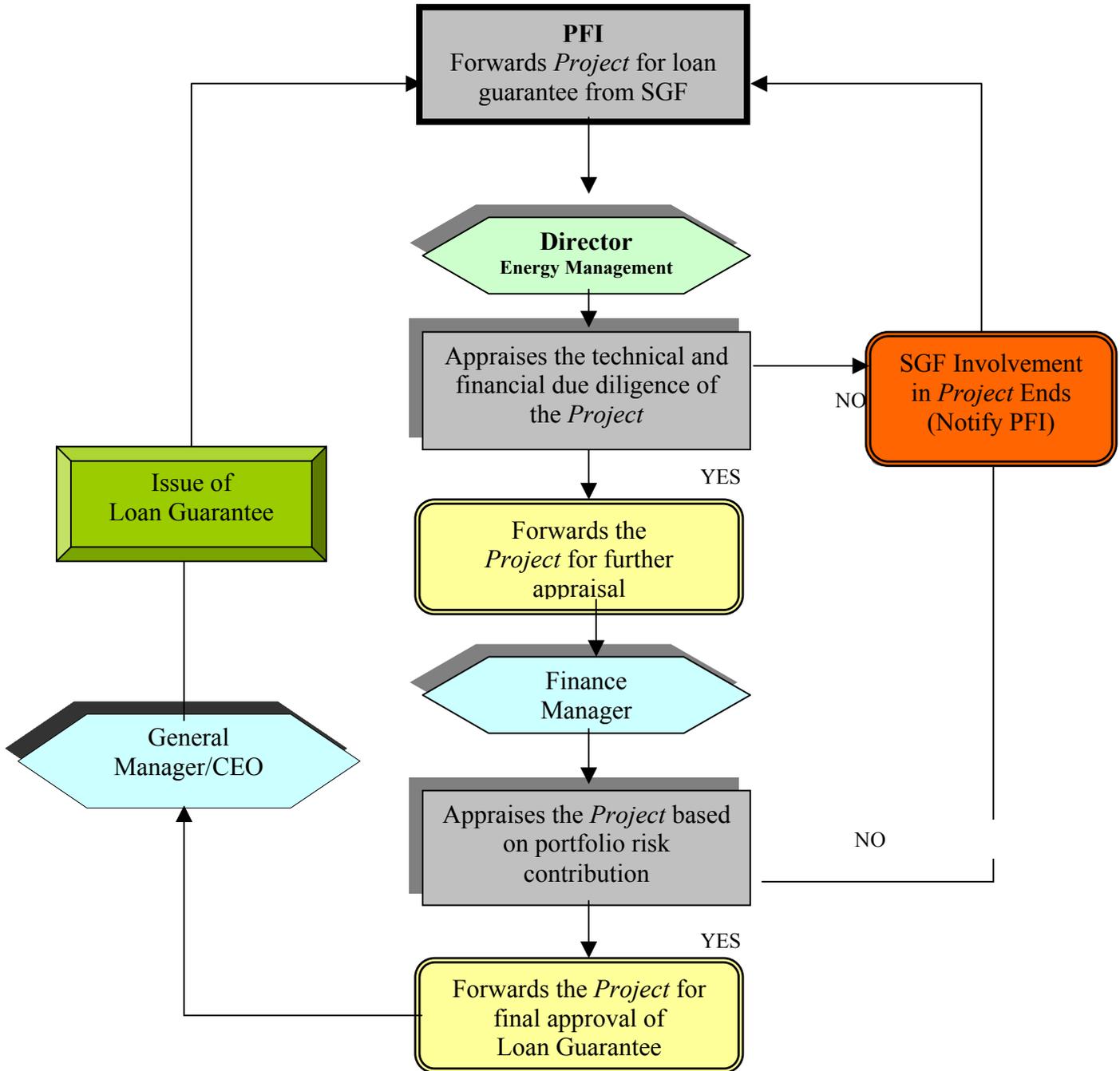


Fig 6.3: Flow Chart for SGF Roles and Functions  
Roles of SGF Staff

This section identifies the immediate and long-term capacity building/training requirements of key stakeholders (i.e., ECF, PFIs, and ESCOs). It also includes a discussion on end-user awareness requirements and publicity programs essential for the program to succeed.

### 7.1 Energy Conservation Fund

Fund management, ESCO skill development and certification and energy efficiency proposal evaluation and project monitoring can be identified as main capacity building tasks of the ECF. To perform these tasks efficiently, ECF will require that a carefully structured capacity-building/training component be implemented before the introduction of the SGF and a series of follow-up activities be designed to enhance the capabilities of the ECF after implementation.

Areas for immediate capacity building:

- Fund management – basic operations of SGF;
- Energy efficiency project implementation on the guaranteed saving mechanism;
- Energy efficiency project monitoring and saving verification;
- Performance contracting and project funding;
- Energy auditing and energy efficiency proposal development;
- Energy efficiency project evaluation; and
- Certification of service providers.

Areas for long-term capacity building:

- Fund management – investment opportunities, risk assessment/mitigation, etc.
- Program evaluation;
- Energy auditing; and
- Certification of energy auditors.

A training session, a month prior to the introduction of the program is recommended to meet the immediate capacity-building requirements of the ECF. Long-term programs can be conducted annually.

In addition to the training session proposed, exchanges and study tours are also proposed for the staff attached to the SGF/ECF to establish links with successful guarantee facilities operating in countries, such as China and Hungary.

### 7.2 Participating Financial Institutions

Energy efficiency/conservation project development, project implementation, energy efficiency project funding and evaluation can be identified as the main areas for PFI capacity building.

Key areas for capacity building:

- Introduction to energy efficiency projects (e.g., basic knowledge of energy efficiency, type of projects, terminology, case studies, and project site visits);
- Role of PFIs in the field of energy efficiency/conservation (e.g., saving potential in industrial sectors, effects on cost of production);
- Brief introduction to energy supply and tariffs;
- Introduction to ESCO concept;
- Energy efficiency project financing, evaluation, and implementation;
- Performance contracting;
- Monitoring and verification of savings; and
- SGF operations.

Immediate capacity building requirements should be completed at least a month prior to the introduction of the program.

### 7.3 Energy Service Companies

The ECF is expected to undertake capacity building of service providers in following areas:

- Preliminary assessment of the end-user (borrower);
- Energy auditing (e.g., walk through audits and detailed audits);
- ESCO project development;
- Performance guaranteeing;
- Monitoring and verification of saving;
- Energy efficiency project implementation: issues related to subcontracting, back-to-back warranty; and
- ESCO certification.

For the program to be successful, these training sessions should be conducted at regular intervals (quarterly).

Immediate requirements should focus on energy auditing, ESCO project development, performance contracting, and monitoring/verification of savings. It is also proposed to conduct these sessions at least a month prior to the introduction of the program.

Twinning arrangements and exchanges with successful ESCOs operating in South Asia can be useful to build capacity of ESCO in Sri Lanka.

### 7.4 End-User Awareness and Program Publicity

End-user awareness and publicity are essential for the success of the program. The ECF should initiate these activities from resource available within the fund or outsourcing services to skilled organization, such as Sri Lanka Energy Managers' Association and the Institution of Engineers, Sri Lanka.

### 7.4.1 End-User Awareness

End-user awareness programs should include:

- Benefits of energy efficiency (e.g., effects on cost of production, bottom line, etc.)
- Awareness on energy supply, demand, and tariffs, and anticipated changes in the near future;
- Energy efficiency success stories;
- Barriers for energy efficiency and ways to overcome these barriers;
- Energy efficiency project design and implementation;
- Services offered by ESCO;
- Guaranteed saving and performance contracting;
- Monitoring and verification of savings; and
- Energy efficiency project financing and SGF.

Programs should be designed for technical and non-technical employees attached to the end-user's facility and should be conducted at regular intervals.

These awareness programs can be partly or fully funded by the service providers and/or Energy efficiency equipment suppliers and concept promoters.

### 7.4.2 Publicity for Program

Publicity is essential for the program to be effective. It should be carefully designed to highlight the benefits for energy efficiency/conservation, barriers for energy efficiency project financing, SGF concepts for overcoming these barriers, and ways to benefit from the concepts. The ECF, PFIs and ESCOs can be a part of the publicity program, and cost of such programs should be shared among these stakeholders. Publicity can be provided using printed/electronic news media, brochures and leaflets, seminars, etc.

## 7.5 Schedule of Proposed Capacity Building/Training

A proposed schedule for a capacity building/training program for the key stakeholder over eight months is given in Figure 7.1.

Sustainable Guarantee Facility - Capacity Building/Training of Key Stakeholders												
No	Institutions/Tasks	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 9	Month 9
		Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11
1	<b>Energy Conservation Fund</b>											
	Fund management											
	EE project on guarantee											
	Monitoring/verification of saving											
	Performance contracting											
	Energy auditing/proposal development											
	EE project evaluation											
	Certification of auditors											
	Twinning arrangements/exchanges											
	SGF evaluation											
2	<b>Participating Banks</b>											
	Introduction to EE projects											
	Role of PFIs in EE/Conservation											
	Energy supply and tariffs											
	ESCO concept											
	EE project financing											
	EE project evaluation											
	EE project implementation											
	Performance contracting											
	Monitoring/verification of saving											
	SGF operations											
3	<b>ESCOs/Project developers</b>											
	ESCO certification											
	Assessment of end-users											
	Energy auditing											
	ESCO project development											
	Performance contracting											
	Monitoring/verification of saving											
	Sub contracting											
4	<b>End-Users</b>											
	Publicity/awareness											

Fig 7.1: Schedule of Proposed Capacity Building /Training

### 8.1 The Facility

The Sustainable Guarantee Facility (SGF) is an approach that would provide a repayment guarantee to Participating Financial Institutions (PFIs) for loans made to targeted energy efficiency projects. The main purpose of the SGF is to overcome the major barrier for energy efficiency projects – the lack of collateral – by providing a repayment guarantee that will act as a collateral substitute and also serve to lower the costs of financing for borrowers as an incentive to pursue energy efficiency projects.

### 8.2 Institutional Structure

The Energy Conservation Fund (ECF); fund manager, participating financial institutions (PFIs); lenders, Energy Service Companies (ESCOs); project developers and end-users (borrowers) are identified as main stakeholders in the SGF structure.

An ESCO certified by the ECF will be responsible for the design and implementation of an energy efficiency project on a performance guarantee basis. A PFI listed with the ECF will consider funding of the project after a due diligence analysis of borrower is completed and seek repayment guarantee from the ECF to overcome barriers for lending (agreements and contracts to be executed by the ESCO, borrower, and PFIs are currently available).

### 8.3 Management Structure for the SGF

In the facility management structure, the General Manager/CEO – ECF, who will act as the SGF Fund Manager has ultimate responsibility for the functioning of the SGF. Reporting directly to the Fund Manager are the Finance Manager and the Director of Energy Management.

The Finance Manager will function akin to the credit committee of a bank and will be responsible for risk management of the SGF, the obtaining of additional money from donor agencies and other sources to capitalize the guarantee fund and for the investment of the guarantee fund assets in risk-free liquid securities growing at the risk free rate of interest.

The Director of Energy Management will be responsible for the client side activities of the SGF and will work with the PFIs to identify potential projects, work with the PFI to ensure the highest likelihood of approval of the projects for guarantee by the Finance Manager, and ensure that the projects the PFIs bring to the SGF meet agreed upon technical standards and all the specified debt service, cash flow, and other financial covenants. In addition, assisting the General Manager/CEO will be an individual responsible for the P&L and the clearing operations of the SGF.

## 8.4 Financial Resources for the SGF

The ECF is expected to make investment of Rs. 50 million and seek further assistance from Government of Sri Lanka and donor agencies, such as the ADB and JBIC. Given that the SGF operates as a reserve fund, it will also consider short-term investments to enhance the amount in the reserve fund.

The SGF levy/premium recommended is expected to meet the cost of facility management, ESCO capacity building, and certification and publicity program to be initiated by the ECF.

## 8.5 Loan Guarantee Limit

It is recommended for the SGF to guarantee only **75%** of the loan approved, expecting the balance **25%** to be committed by the PFIs.

## 8.6 Loan Loss Reserve

The basic operation of the SGF is that the financial resources available would be set aside or reserved according to a certain percentage based on estimated loan losses. A reserve of **15%** of the loans guaranteed based on the highest percentage of Non-Performing Loan Portfolios (NPL) of banks in Sri Lanka is recommended for this purpose.

## 8.7 SGF Potential

With a loan loss reserve margin of **15%** and a loan guarantee of **75%**, the SGF could support energy efficiency projects equivalent to eight times the investment in the reserve fund. With the initial fund of Rs. 50 million, the SGF could support around Rs. 400 million in energy efficiency projects. The important point is that the reserves in the SGF will only be used in case of borrower default payment to the guarantee bank.

## 8.8 Premium on Loans Guaranteed

An annual premium of **0.5%** of the guarantee offered by the SGF will be charged from the PFIs to meet the facility management costs, based on the rate charged by the Central Bank of Sri Lanka for the credit guarantee scheme operated for the SMI sector. Since the SGF expects the PFIs to reduce the cost of borrowing to the end-user, a higher premium is not recommended during the initial stages of the program.

## 8.9 Operating Guidelines

The operating guidelines will provide guidance to SGF staff as well as staff of the PFIs on the policies and procedures for considering loan guarantees under the SGF.

The operating guidelines clearly define the eligible applicants and projects, terms and conditions of guarantee, borrower's credit standards, procedure for claiming SGF's guarantee, and loan default and recovery to strengthen loan repayment process preserve the integrity of the SGF as well as its guarantee.

### 8.10 Training and Capacity Building

The training of staff and capacity building of the main stakeholder institutions are to be coordinated by the ECF as per training and capacity building requirements listed in this report (Section 7). The training schedule prepared for this purpose should be followed with initial activities before the introduction of the SGF (Figure 7.1).

### 8.11 Implementation Schedule

The implementation of the project is expected to commence in June, once the technical assistance report is approved. The first activity will be the capacity building of the ECF and other key stakeholders. The recommended project implementation schedule is given in Figure 8.1

### 8.12 Project Review

It is recommended the SGF scheme be reviewed once the loan guarantee amount reaches **80%** of the initial investment by the ECF (Rs. 40 Million). Any necessary steps should be considered to strengthen scheme. Depending on the success of the SGF, the ECF will approach the Treasury to obtain a Treasury Guarantee for the SGF to guarantee loans beyond the invested amount in order for the PFIs to accommodate lending aggressively for energy efficiency projects.

### 8.13 Guarantee for Renewable Projects

During the proposed project review process, it is also recommended to consider ways of enhancing the reserve fund to accommodate renewable energy projects as originally requested by the ECF.

The World Bank already provided two credit facilities with a specific focus on renewable energy projects for commercial and off-grid operations: ESD and RERED. Therefore, loan guarantees for renewable energy projects under the SGF will require a careful study of process in this area, barriers for renewable energy project funding in Sri Lanka and ways to overcome these by using an investment guarantee.

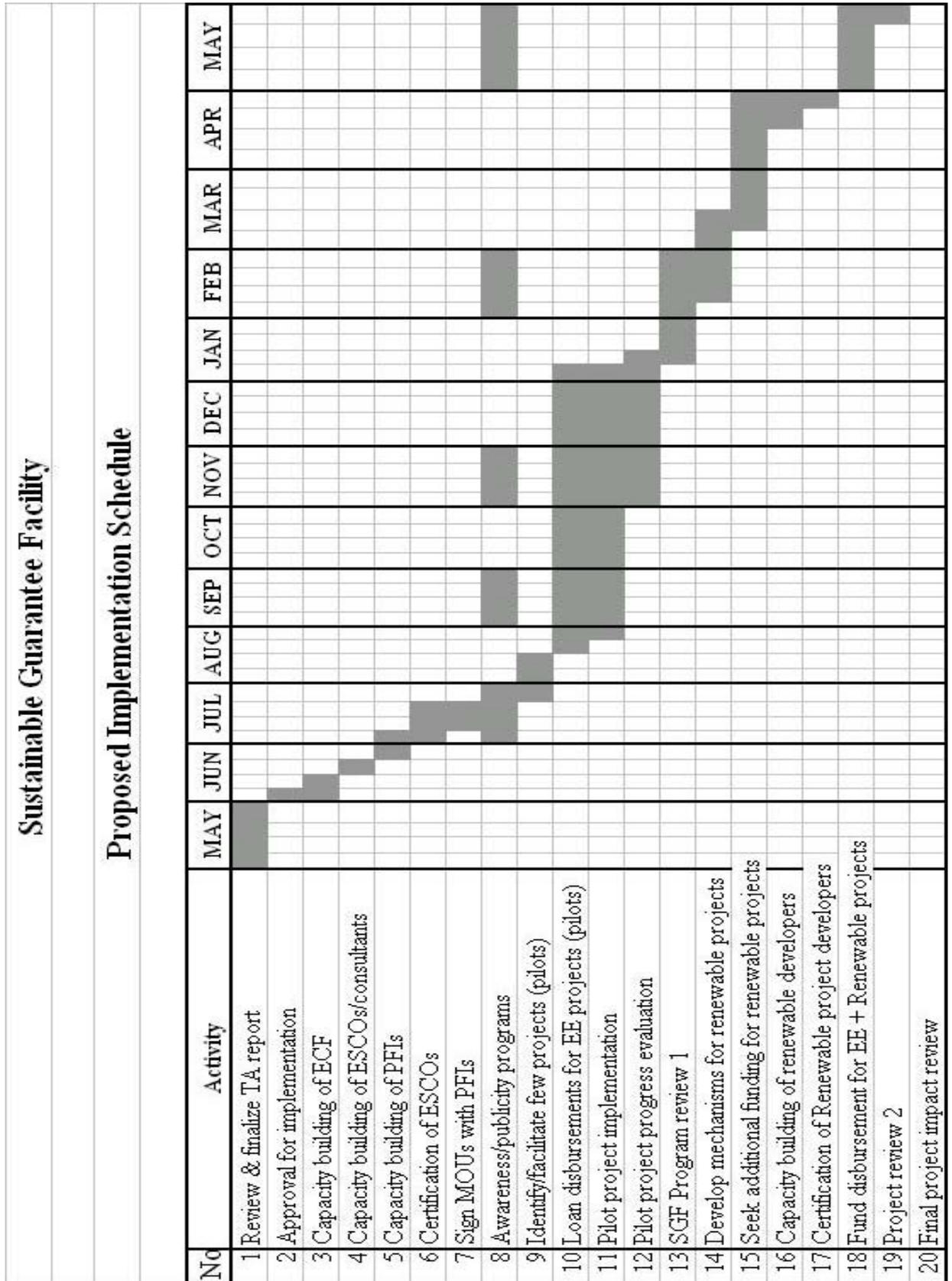


Fig 8.1: Recommended Project Implementation Schedule

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**March 3, 2004, 11.30 a.m. & March 16, 2004, 2.30 p.m.**

**Meeting with Mr. R.D. Gunapala, Project Director, Project Management Unit, Ministry of Enterprise Development, Industrial Promotion**

Points discussed

- Description of existing CBSL guarantee schemes
- Problems encountered by banks in the CBSL Credit Guarantee Scheme
- Funding schemes available at present
- Premium should be paid but a nominal amount (e.g., **0.5%**)
- CBSL approval not required
- Process of claiming from CBSL too stringent
- Energy efficiency projects minimum risk
- ESCO involvement further reduces risks
- CBSL guarantee was a temporary measure to avoid liquidity problems; banks to recover and pay back CBSL
- **%** Guarantee could be based on the loan amount; bigger the loan lower the **%** of guarantee
- Normal bank agreements should be executed
- Should deal with bank head officers only
- 3-5 years repayment period and Rs. 10.0 million maximum guarantee, reasonable
- CBSL approval not required to join the SGF scheme
- ECF Certificate of Guarantee is acceptable.
- 1979 SMI Guarantee scheme started with Rs. 265 million seed capital
- Now grown up to ~ Rs 3 Billion
- Normally under credit lines the on-lending rates are based on AWDR (Average Weighted Depository Rates – by Commercial Banks) + **%** margin for the bank
- By October, E-Friends scheme is expected to be operational.

**March 3, 2004, 10.30 a.m.**

**Meeting with Mr. W.D. Premachandra, Manager Refinance Operations, NDB**

Points discussed

- **20-25%** commitment by the banks essential
- Then banks will follow good banking practices
- To build up fund at least **0.5%** premium required to be paid by banks on the outstanding balance of guaranteed amount
- Low collateral more risk to the fund
- CBSL guarantee was a temporary measure; recovery should not be stopped
- Security should be of some proportion
- Normal bank agreements should be executed
- Should deal with bank head officers only
- Unlike CBSL guarantee schemes, SGF should be flexible
- Debt-equity ratio depend on the client and project and other factors
- 3-5 years repayment period and maximum guarantee of Rs. 10.0, reasonable
- CBSL approval not required to join the SGF scheme
- ECF Certificate of Guarantee is acceptable.

**March 5, 2004, 9.30 a.m.**

**Meeting with Mr. Jayantha Nagendran, Senior Vice President – RERED Project DFCC Bank**

Points discussed:

- Charge of a premium is a must
- Bank contribution must be around **20-30%**
- If banks want the guarantee, they will ask for it
- Avoid CBSL guarantee scheme problems
- Guarantee could be based on quality of appraisal
- Better to have minimum possible collateral, such as personal guarantees, project assets, etc.
- Low or no collateral will encourage end-users
- In case of default, normal recovery process to be initiated by the bank
- Technical experts on call, registered with the ECF
- Consultant could decide on the amount of guarantee depending on the risks involved
- Guarantee could be linked to the size of the loan
- In case of modernization, with energy efficiency effects, only part of loan to be guaranteed
- No need of guarantee support for commercial mini hydros
- Guarantees may be required for new technologies, bio-mass projects, off-grid hydros, etc
- Discussed other loan schemes available for energy efficiency projects e.g., RERED, proposed KfW loan, ADB Plantation Development Project
- **15%** reserve ok, initially
- Certified ESCOs to prepare project proposals
- 3-5 years repayment period and Rs. 10.0 million maximum guarantee, reasonable

**March 9, 2004, 11.00 a.m.**

**Meeting with Mr. M. M. Attanayake, Director, Regional Development (in charge of Credit Guarantee Schemes operated by CBSL)**

Points discussed

- Charge of a premium is a must
- Higher premium for **100%** guarantee
- Premium to be varied depending on the risks involved
- Premium is not a cost; it is the ‘price paid for protection of bank funds’
- Collateral is a must for recoveries
- Agreeable to **80%** guarantee on the loan
- **10%** reserve is recommended
- Helps banks to provide long-term loans
- Default would be after nonpayment of three consequent installments
- CB guarantee scheme is a temporary measure to avoid liquidity problems
- SGF to consider participating in borrower’s equity; better control over the project
- Funds in the SGF to be invested in treasury bonds, fixed deposits, etc.
- A credit guarantee scheme was to be implemented by the with Ministry of industries with the Government India Government to contribute Rs. 200 million

and JBIC to contribute 400 million, did not materialize due to change of government in 2002.

- Therefore, guarantee scheme concept is well taken
- CBSL approval not required for ECF to operate SGF if the ECF Act provides such provisions

### **March 3, 2004**

#### **Meeting at ECF with Prof. K.K.Y.W. Perera, Chairman, Dr. V.U. Ratnayake, GM and Harsha Wickramasinghe**

##### Points discussed

- Brief History of ECF
- Present activities
- Involved in energy conservation activities, energy efficiency studies, etc
- Energy efficiency audit equipment available, flue gas analyzers, energy analyzers, etc.
- Request to include Finance Ministry to be included in the Steering Committee
- Agreeable to the work plan of Nexant with regard to the establishment of SGF
- Agreed to attend meeting today
- Agreed on June 15 for final report

### **March 3, 2004 12.30 p.m.**

#### **Meeting with Mr. Ravindra Pitigalage , Financial Controller LTL**

##### Points discussed

- Credit guarantee for loan plus interest.
- Maximum interest for six months only in case of claim
- Always the claim paid should not exceed the guaranteed amount
- **80%** guarantee – still bank should check the due diligence of the client
- Not required to forward PFI's appraisal report as declaration by PFI is available
- **15%** reserve, based on average NPL % in Sri Lanka
- ESCOs to be certified by ECF
- The grace period to be from the first installment (advance payment) to the last
- ESCOs to prefer loan repayment period to be payback period; extension beyond payback period will be under maintenance contract between ESCO and end-user.
- Guidelines to be provided to ESCOs
- Agreed to prepare template for the ESCO proposal
- Rescheduling of loans by PFIs to be done with agreement from ECF
- Rescheduling should not exceed 5 years
- The administrative costs should be looked after by the premium; this should not eat into the SGF funds.
- All projects forwarded for funding to come through an ESCO.
- Others to forward proposals through certified ESCOs
- **30%** will be retained by end-user till the performance guarantees are shown.
- **30%** will make ESCOs to minimize implementation time
- PFIs to forward **70%** advance to ESCO on request of end-user; **30%** to be funded by ESCO till the performance guarantees are shown. Once this is done PFI will pay the balance **30%** to ESCO on end-user's request
- Typically 3-5 years acceptable

- M&V protocols and ESCO performance guarantee procedures already in place to be used by ESCOs

**March 10, 2004 10.00 a.m.**

**Meeting with Mr. R. D. Abeywardena, Senior Manager, NDB**

Points discussed

- Credit guarantee is good as energy efficiency equipment is not good for collateral as no value in isolation.
- What is the binding on the borrower if no collateral is taken
- **80%** guarantee – still bank will check the due diligence of the client
- Credit Information Bureau will give credit information on clients. It is a must by the bank
- However, the credit decision will be by the bank, guarantee will ease things to the client
- To avoid delays and unnecessary expenditure, the ESCO to check with end-user, details of his bank, and check with the bank whether the end-user is acceptable to the bank. Very preliminary check.
- Definitely the banks will prefer ESCO to do the project and ESCO should be recognized
- It is a four-party agreement: end-user, ESCO, Bank, and SGF/ECF
- Agreeable to release **70%** to ESCO when requested through borrower, but not on all cases. Depending on the client, it may release lower % and request client to release an amount from his contribution. (D:E ratio e.g., 70:30, or could be 60:40)
- Typically 3-5 years acceptable
- D/E ratio 70:30 may be maintained, depending on the client
- Generally **15%** NPLs in Sri Lanka
- **10%** SGF reserve ok
- Only the commercial banks and development banks would do at present; RRDBs now RDBs should be avoided
- Agreeable to proceed with the recovery process even after guarantee is paid and share the realizations
- Rescheduling should not exceed 5 years

**March 12, 2004, 11.00 a.m.**

**Meeting With Mr. Moksevi R. Prelis, Dir/CEO Nations Trust Bank**

Points discussed

- Agreeable to **80%** guarantee on the loan (states that it is a somewhat high guarantee %)
- Could reduce guarantee % later
- Many don't see the savings of energy projects
- Banks might give to their good clients whom they would fund anyway
- Repayment term 3-5 years acceptable
- Guarantee must have a cost – premium **0.5%** ok
- Identification of good ESCOs is a must; certification is fundamental
- Failures may not be due to energy project but due to various other reasons
- If this SGF project is proven it will snowball
- Lot of bad experience with solar heating at home with long-term operation

- The energy efficiency projects should be proved over a period of time
- Should demonstrate to the others to believe.
- As it is the risk profile is very low.
- Evaluation of the end-user (borrower) very important (by bank)
- Declaration by bank, good

**March 12, 2004 12.00 noon**

**Meeting with Mr. Aravinda Perera, DGM-Credit, Sampath Bank**

Points discussed:

- Charge of a premium is ok
- Paid premium to CBSL for 16 years on outstanding loan balance but claimed only twice
- CBSL guarantee is an advance to avoid liquidity problems; banks have to recover and repay the CBSL
- Already started energy efficiency project in a Plantation Co.
- **15%** reserve ok initially, reduce later
- **80%** Loan guarantee ok as not any body can walk in and get guarantees
- Certified ESCOs to prepare project proposals
- 3-5 years repayment period and Rs. 10.0 million maximum guarantee, reasonable

**March 12, 2004, 4.00 p.m.**

**Meeting with Mr. H.M.A.B. Weerasekara AGM, Mr. D.M. Gunasekara, Relationship Manager, Bank of Ceylon**

Points discussed

- Charge of a premium is ok
- Requests guarantee amount to be deposited in the respective banks that approve the loans
- Shall treat as a normal loan at market rates.
- If cash is deposited, can give a better rate to the borrower
- Guarantee certificate, piece of paper, has no value without cash backing
- **80%** Loan guarantee ok
- Requests energy efficiency audit in the BOC building as the first project
- 3-5 years repayment period and Rs. 10.0 million maximum guarantee, reasonable
- CBSL approval not required to join the SGF scheme

*(Note: interviewer reported that they did not properly understand how the guarantee scheme works)*

**March 15, 2004, 9.30 a.m.**

**Meeting with Mr. Piyal Hennayake AGM, Mr. I.H.A. Wickramasinghe, Chief Manager, and Mr. Shanaka Fonseka, Manager, Hatton National Bank**

Points discussed

- Briefed developments as did not attend meeting on the 10<sup>th</sup>
- Have a good relationship with LTL Energy
- Project repayment risk taken by ESCO ok
- Bank can take collateral depending on the client

- Would proceed with legal action even if guarantee is paid and if recovered would share recoveries
- Debt equity ratio depends on the client and project and other factors
- Company failure (e.g., Kabool Lanka Tech. and Credit) risks should be covered
- Shall treat as a normal loan at market rates; may consider reducing a % because of the guarantee; however, present market rates are low.
- **80%** Loan guarantee ok
- 3-5 years repayment period and Rs. 10.0 million maximum guarantee, reasonable
- CBSL approval not required to join the SGF scheme
- ECF Certificate of Guarantee is acceptable.

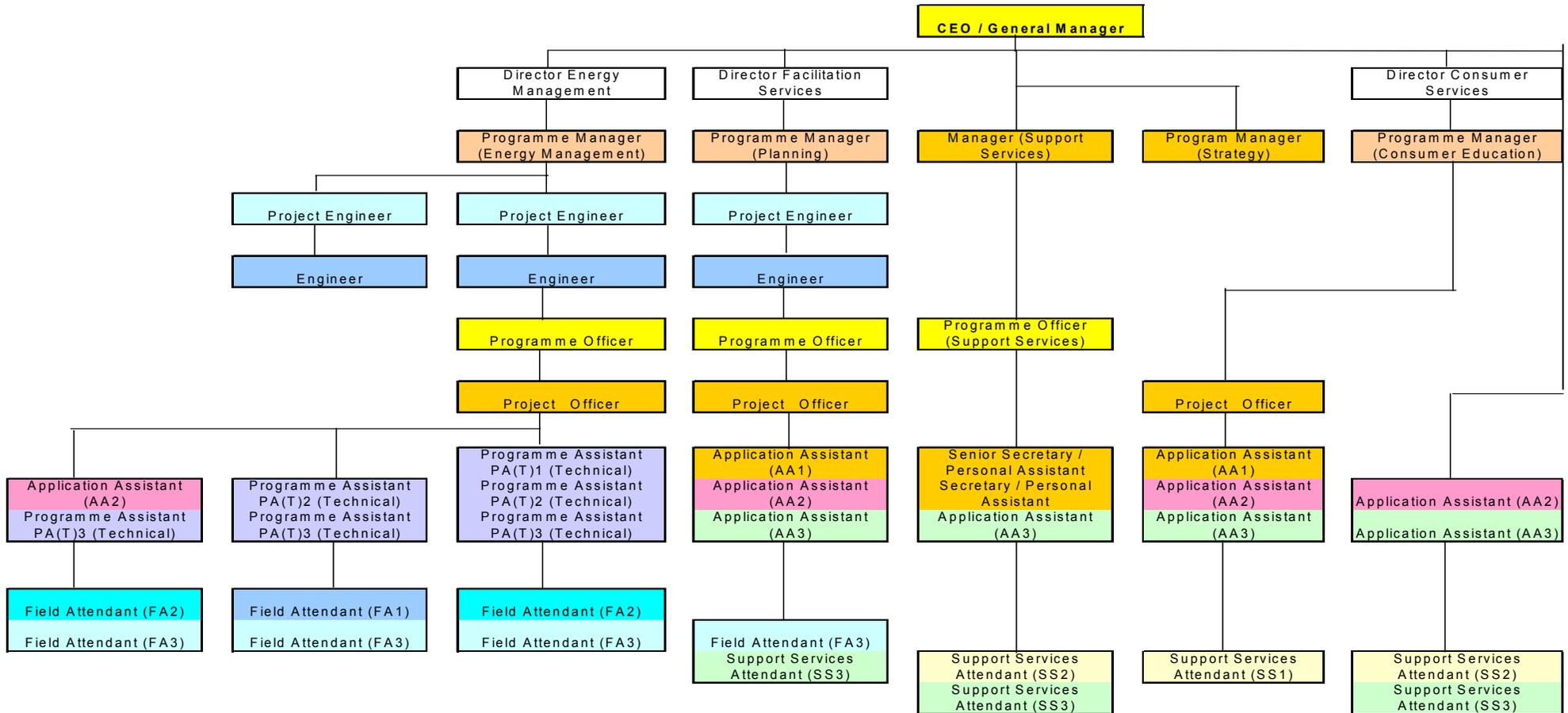
**March 16, 2004**

**Meeting at ECF with Prof. K.K.Y.W. Perera, Chairman, Dr. V.U. Ratnayake, GM and Harsha Wickramasinghe**

Points discussed

- Asked why Technical and Credit guarantees are needed (Explained)
- **80%** too high because of overall guarantee (high risk to ECF)
- Agreed to reduce to **75%** (**80%** already informed to bankers)
- Suggestion: **80%** for technical risk; overall risk - less guarantee (**40-50%**)
- Review % guarantee after one year
- Rs. 50.0 million ECF funds invested in NSB and treasury bonds
- ECF allowed by the ACT to operate SGF
- Identify what triggers the failure; decide payment of guarantee based on the cause of failure
- Norms to certify ESCOs
- 10 good companies to be selected by ESCOs initially
- Whoever agrees to accept ECF Guarantee Certificate to be included in the scheme
- Insurance cover to be taken by company (banks to insist) for fire, floods, civil riots and commotion, etc.
- Requested to get Treasury backing for the SGF

**ORGANISATION CHART - Energy Conservation Fund**







in the report is the creation of a Sustainable Guarantee Fund (SGF), which is expected to provide a certain level of comfort to the lenders, against any possible loan defaults. The ECF too is contemplating ways and means of allocating a capital reserve of approximately Rs. 50,000,000/- in support of creating such a guarantee fund, or as an alternative in creating a revolving fund for energy conservation and renewable energy. This would accelerate the private sector involvement in Energy Efficiency & Renewable Energy Developments.

Considering the complexity of this problem, and the availability of several implementation options, we would like to undertake a closer analysis of the problem through a suitable consultancy. Additional donor funding may also be forthcoming if the initial revolving fund mechanism is properly established.

In the circumstances, we would appreciate if you could kindly seek further technical assistance from USAID to analyse available options and recommend appropriate strategies for implementation of an actual operational mechanism.

Yours sincerely,



Prof. K.K.Y.W. Perera

Chairman

Energy Conservation Fund

Copy : Secretary, Ministry of Power & Energy.

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**Energy Conservation Fund**  
 A Statutory Board within the Ministry of Power & Energy



9<sup>th</sup> March 2004

Our Ref : FM/GF/01-5

The Mission Director  
 United States Agency for International Development  
 44, Galle Road  
 Colombo 03.

Attn : Mr.Upali Daranagama

Dear Madam,

**Sustainable Guarantee Facility for Sri Lanka**

We write with reference to the draft terms of reference submitted to you, and would like to thank you for the valuable contributions made by your team in further developing the document. We would like to request you to engage a suitable consultant to undertake this assignment at the earliest possibility.

Further, we have pleasure in informing you that we have initiated action to obtain formal approval from the Board of Directors of ECF to commit funds for the guarantee fund with a ceiling of Rs.50 million for the present.

With best regards,

Yours sincerely,

Prof.K.K.Y.W.Perera  
 Chairman

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