KERALA STATE ENERGY CONSERVATION FUND (KSECF) FINANCING SCHEMES

FINAL REPORT

Report Prepared for
Energy Management Centre
Department of Power, Kerala

Prepared by
Dilip R. Limaye
Dr. Bhaskar Natarajan
B. Anil Kumar
Swati Lal
Dr. Pradeep Tharakan
International Resources Group, Ltd.

For
ECO Asia Clean Development and Climate Program
www.usaid.eco-asia.org/programs/cdcp

November 2009

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SECTION 1

INTRODUCTION

SECTION 1 - INTRODUCTION

BACKGROUND

In May 2008, the ECO-Asia Clean Development and Climate Program (ECO-Asia CDCP) entered into a partnership agreement with the Energy Management Centre, Department of Power, Government of Kerala, to support the creation and implementation of the Kerala State Energy Conservation Fund (KSECF) in response to India's national Energy Conservation Act of 2001 which requires Indian states to establish energy conservation funds at the state level to facilitate implementation of energy efficiency projects. While many states have considered the establishment of such funds, Kerala is the first to take the initiative to establish the KSECF.

WHY THE ENERGY CONSERVATION FUND?

A State energy conservation fund is needed to overcome the major financing barriers in Kerala that include the following:

- The relatively small size of energy efficiency (EE) projects makes them less attractive for conventional bank financing.
- The concept of "project financing" has not yet been accepted for EE projects.
- Conventional lenders do not have sufficient knowledge and understanding of EE technologies and their economic and financial characteristics.
- Financial institutions may perceive EE projects as more risky than their other conventional lending.
- The transaction costs for EE projects are relatively high.
- EE projects have a relatively high proportion of "soft costs."

In addition, Kerala has to comply with the requirements of the Energy Conservation Act, 2001 (EC Act). The EC Act is the most important legislative initiative related to energy efficiency in India's history. Its purpose is to "provide for efficient use of energy and its conservation and for matters connected therewith or incidental thereto." The Act empowered the Central Government, State Governments and the newly established Bureau of Energy Efficiency (BEE) with certain powers and functions. One of the key elements of the Act as it related to the States is the mandatory requirement for the establishment of a designated agency "to coordinate, regulate and enforce provisions of this Act within the State."

In response to these requirements Kerala has nominated the EMC as the designated agency for the purposes of the EC Act. EMC has developed the preliminary structure of the Kerala State Energy Conservation Fund (KSECF) and drafted the rules for the KSECF.

RATIONALE FOR KSECF

The KSECF will:

- Facilitate increased implementation of energy efficiency (EE) projects by large energy users

- Facilitate engagement of commercial financial institutions to participate in EE project financing
- Facilitate ESCO industry development and participation in EE project implementation
- Demonstrate leadership in EE through implementation of EE projects in the public sector
- Alleviate the power shortage and related impacts on the state economy
- Meet the mandated requirements of the EC Act, 2001

OBJECTIVES AND SCOPE OF KSECF

The objectives and scope of the KSECF are summarized below[1]:

- Support the financing of specific EC projects using a variety of options such as debt financing, equity financing, grants, and credit or risk guarantees to financial institutions.
- Contribute to the development of the EE market in Kerala by financing projects with private sector implementation through energy service delivery organizations (such as ESCOs).
- Develop and demonstrate model financial transactions.
- Develop typical financing agreements that can be used by the private sector.
- Build the capacity of local financial institutions in EE project transactions to increase their knowledge, interest and capability for financing such projects
- Leverage commercial funds and create a sustainable market for EC project financing.

The KSECF shall provide financing for all energy consuming sectors, including industrial, SME, commercial, domestic, street lighting, and agriculture sectors.

DESIGN OF THE KSECF

The KSECF will initially be managed by the EMC. As the fund size grows, EMC will have to add substantial capacity in the area of financing and financial management. Therefore, it has been recommended that the Government of Kerala (GOK) consider the engagement of a professional fund manager under the direction of the EMC. Other options that may be considered by GOK for fund management include a newly created Trust or Agency similar to the Energy Trust of Oregon or the New York State Energy Research and Development Authority (NYSERDA). The KSECF shall have a Steering Committee comprised of representatives of the major stakeholders.

There is a wide range of potential funding sources for the KSECF. These may include funds from Kerala Electricity Surcharge, budget allocation from the State

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[1] See Limaye et al, Establishment of the Kerala State Energy Conservation Fund: Design Report, Submitted to the Energy Management Centre, Department of Power, Kerala, by ECO Asia CDCP, November 2008.

Government, special taxes or levies, government bonds, funds from the Bureau of Energy Efficiency (BEE), bilateral and multilateral donor agencies, commercial financial institutions, and international financial institutions; fees from certification and labeling; and carbon financing[2].

The Government of Kerala will initially provide funds amounting to about Rs. 1 crore for the KSECF from the State budget. It is anticipated that the Bureau of Energy Efficiency (BEE) shall provide matching funds for the KSECF. The total size of the Fund in the Fiscal Year 2009-2010 is therefore assumed to be Rs. 2 crores.

PROPOSED FINANCING SCHEMES

In the initial design of the KSECF[3], a number of schemes were identified which may be used in a variety of ways to finance EC projects. The design and funding of the KSECF, including the various financing mechanisms, were discussed at a Consultative Meeting with Kerala State government officials representing a number of stakeholder departments in October 2008. Based on the results of these discussions, the following financing schemes were selected as candidates for initial implementation.

- Energy Audit Subsidy Scheme
- Interest Buy-Down Scheme for Commercial and Industrial Customers
- Energy Efficiency Loan Fund for Domestic Customers
- Energy Efficiency Grant Scheme for Public Sector Projects
- Performance Contracting Scheme
- Partial Credit Guarantee Scheme

This report provides a description of these financing schemes including the rationale for their use and the implementation rules and procedures. Additional financing schemes will be developed and implemented as the Fund size grows in future years.

BUDGET ALLOCATION

The budget allocation for the various schemes implemented in the Fiscal Year 2009-2010 is shown in Table 1-1.

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[2] See Limaye, et al, op cit.

[3] Ibid.

Table 1-1 - Budget Allocation

SCHEME	TARGET MARKETS	BUDGET (RS. LAKHS)
Energy Audit Subsidy Scheme	Industrial, Commercial and Public	25.0
Interest Buy-Down Scheme	Industrial & Commercial	50.0
Energy Efficient Appliance Financing Scheme	Residential	30.0
Energy Efficiency Grant Scheme	Public (incl. Municipal)	20.0
Performance Contracting Scheme	Public (incl. Municipal)	20.0
Partial Credit Guarantee Scheme	Industrial & Commercial	30.0
Management and Administration	-	15.0
Contingency Fund	-	10.0
TOTAL BUDGET		**200.0**

SECTION 2

ENERGY AUDIT SUBSIDY SCHEME

SECTION 2 - ENERGY AUDIT SUBSIDY SCHEME

INTRODUCTION

The first important step in the implementation of energy efficiency measures is the identification of cost-effective opportunities for energy savings and related cost-reduction. A facility energy audit (also known as an energy feasibility study) includes such identification and assessment of energy efficiency measures (EEMs) and provides the facility owner and/or manager an overview of the economic benefits from implementing the EEMs. It has been generally recognized that obtaining funds for conducting energy audits has often been a barrier. KSECF will offer the Energy Audit Subsidy scheme (EAS) to facilitate the conducting of energy audits.

WHAT IS AN ENERGY AUDIT?

An energy audit is a systematic assessment of opportunities for improvement of energy efficiency through the implementation of EEMs in a facility. The energy audit typically consists of the following steps:

- Collection of information of facility characteristics, including major energy using equipment, physical characteristics, and operating characteristics
- Collection and organization of data on facility energy consumption energy
- Development of a Baseline defining the key facility and energy characteristics
- Identification of the applicable EEMs
- Technical and economic assessment of the EEMs
- Development of economic and financial parameters such as payback, ROI, NPV, and preliminary financing plan
- Preparation of the Detailed Project report (DPR)

DESCRIPTION OF KSECF ENERGY AUDIT SUBSIDY SCHEME

KSECF offers a subsidy for energy audits to encourage and promote the conducting of energy audits for industrial, commercial and institutional facilities in Kerala. A description of the Energy Audit Subsidy scheme is provided below:

Eligibility

The following types of facilities are eligible to apply for funds under the EAS scheme

- Industrial plants
- Commercial buildings
- Hospitals and health care facilities
- State and local government buildings
- Municipal pumping facilities (water treatment, waste water, etc.)
- Municipalities operating street lighting

- Universities and colleges
- Schools
- Religious facilities

Amount of Funding Provided

KSECF will provide 50% of the cost of the energy audit subject to the terms and conditions defined herein

Maximum Amount

The maximum amount of funding provided by KSECF for an audit of a single facility shall be the lesser of Rs. 1 lakh or 15% of the facility's annual energy consumption during the prior year.

Total Budget

The total budget for this scheme during the fiscal year 2009-2010 is Rs. 25 lakhs.

Requirements

The following are the requirements to obtain funds under the EAS scheme.

1. The facility must be eligible according to the eligibility criteria stated above
2. The energy audit must be conducted by an Energy Auditor or Manager certified by the Bureau of Energy Efficiency (BEE).
3. KSECF shall select and maintain lists of certified energy auditors and managers for industrial, commercial and public sector projects.
4. Applications for funding must provide documentation of the source of funds for the applicant's share of 50% of the total costs.
5. Upon receipt of the customer application, KSECF shall solicit bids from its list of auditors, and select and assign the auditor to the applicant.
6. The energy audits must be completed within 3 months of authorization by KSECF.
7. KSECF will reimburse 50% of the actual cost of conducting the energy audit up to the maximum as defined above. A payment of 25% shall be made by KSECF to the auditor at the initiation of the audit. KSECF shall pay the auditor the remaining 25% upon completion and submission of the audit report and acceptance by KSECF and the customer.
8. Any costs incurred prior to the approval of the application under the EAS scheme shall not be eligible for 50% reimbursement.
9. Detailed engineering design is considered a part of the implementation process and will not be eligible for 50% reimbursement.
10. Equipment purchases are not eligible for 50% reimbursement.
11. No single organization will receive more than 20% of the total funds available under this scheme.

12. The facility or the energy auditor will be required to submit a Detailed Project Report (DPR) documenting the audit results as specified by KSECF, before cost reimbursement is made.

Application Deadline

Applications for funding under the EAS scheme should be submitted to KSECF by no later than December 31, 2009. However, applications will be considered on a first come first served basis as they are received, until the total budgeted funds are committed. If the available funds are exhausted while applications have been received and are still under review, these applications will be held in an "application pipeline" and will be processed if additional funds become available. At the discretion of KSECF, these applications may be considered or requested to be resubmitted under the subsequent year funding. However, no applications received after December 31, 2009 will be considered for funding under this year's budget.

Application and Review Process

Any eligible facility may submit an application using the EAS Application Form.

Upon receipt of the application, KSECF shall review the submitted information to assess whether the application meets the eligibility requirements. If it does not meet the requirements it shall be returned to the applicant. If it meets the requirements, KSECF shall inform the applicant that the application is under review.

After completion of the review KSECF may seek clarifications from the applicant or negotiate certain elements of the application. When the application is approved, KSECF shall send an Approval Letter to the applicant.

The applicant may then initiate the energy audit and upon completion, submit the Detailed Project Report to KSECF, along with the documentation of all of the costs of conducting the audit and preparing the DPR.

KSECF shall review the DPR, and upon approval, shall reimburse the applicant for 50% of the documented costs.

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SECTION 3

INTEREST BUY-DOWN SCHEME
FOR COMMERCIAL AND INDUSTRIAL CUSTOMERS

SECTION 3 - INTEREST BUY-DOWN SCHEME FOR COMMERCIAL/INDUSTRIAL CUSTOMERS

INTRODUCTION

Most energy efficiency projects require a capital investment to be made in energy-efficient products, technologies and/or equipment. The implementation of the project leads to energy savings which in turn provide energy costs savings, which can be used to pay off the investment costs. Many energy efficiency projects are financed using loan funds from financial institutions. The economic attractiveness of the project is therefore influenced by the interest rate at which the project financing has been made available. The economics of the EE project (discounted payback, cash flow, and net present value) can therefore be improved if the financing can be made available at a low interest rate.

WHY INTEREST BUY-DOWN?

A low interest loan can be provided for EE projects by simply making available funds from the KSECF to the project developer or implementer as a direct loan from KSECF. However, this approach will require the KSECF to have a large pool of funds available for the program, since KSECF would have to provide all the financing. An alternative approach that has been adopted by KSECF is to work with commercial financial institutions and provide them an "interest buy-down" that wil enable them to reduce the interest charged to the borrower. This Interest Buy-Down Scheme (IBD) will allow KSECF to provide financing for a larger number of projects with the available resources.

HOW WILL THE IBD SCHEME WORK?

KSECF shall select a number of participating financial institutions (FIs) to implement this scheme and negotiate the terms of the scheme including any interest reduction offered by the FIs. The participating FIs will sign agreements with KSECF, the format of which is provided later in this Section. A borrower interested in obtaining financing for an EE project will simultaneously submit an application to KSECF and to one of the participating FIs. KSECF will be responsible for validating that the project meets the criteria for energy efficiency as established by KSECF. The FI will conduct the usual due diligence including credit evaluation and other assessments to determine the eligibility of the borrower to get the loan. The FI will then approve the loan terms in accordance with its commercial lending practices. KSECF will provide funds to the FI to reduce the interest rate to the borrower. The FI will then issue the loan at a lower interest rate than the commercial borrowing rate. Details are provided below.

DESCRIPTION OF THE INTEREST BUY-DOWN SCHEME

The Interest Buy-Down Scheme will operate as follows:

Facility Eligibility

The following types of facilities are eligible to apply for funds under the EAS scheme

- Industrial plants
- Commercial buildings
- Hospitals and health care facilities
- Universities and colleges
- Schools
- Multifamily buildings

The facility needs to meet the criteria for commercial borrowers established by the financial institution.

Eligibility of Project

Any EE project that provides energy and cost savings in an eligible facility is eligible for the IBD scheme provided that:

- It is supported by an energy audit conducted by an accredited energy auditor
- The DPR is submitted with the application
- The simple payback for the project (capital costs divided by average annual cost savings) is not less than two years and not more than seven years.

Participating Financial Institutions

Any financial institution may participate in the IBD program by signing a Participation Agreement with KSECF. A list of participating FIs will be published by KSECF.

Project Size

The minimum project size shall be established by the participating FIs. The maximum project size may also be established by the FI, but KSECF will provide interest buy-down for only the first Rs. 1 crore of investment.

Amount of Interest Buy-Down

KSECF shall provide an interest buy-down of 4% below the standard commercial borrowing rate of the FI, which will be negotiated and specified in the Agreement between the FI and KSECF. The KSECF IBD will only apply for the first 5 years of the loan. If the loan period is longer than 5 years, the interest rate will revert to the standard commercial borrowing rate after 5 years.

Payment to the Financial Institution

KSECF shall make a one-time front-end payment to the FI at the time of the closing of the loan financing to enable the FI to offer an interest rate 4% below its standard commercial borrowing rate for the first five years of the loan. The methodology for calculation of the payment from KSECF to the FI is shown later in this Section.

Total Budget

The total budget for this scheme during the fiscal year 2009-2010 is Rs. 50 lakhs.

Application Deadline

Applications for funding under the IBD scheme should be submitted to KSECF and one of the FIs by no later than December 31, 2009. Applications will be reviewed on a first come first served basis as they are received, until the total budgeted funds are committed. If the available funds are exhausted while applications have been received and are still under review, these applications will be held in an "application pipeline" and will be processed if additional funds become available. At the discretion of KSECF, these applications may be considered or requested to be resubmitted under the subsequent year funding. However, no applications received after December 31, 2009 will be considered for funding under this year's budget.

Application and Review Process

1. Any eligible facility may submit an application for an eligible project to KSECF using the IBD Application Form
2. The facility shall simultaneously submit an application to one of the participating FIs using the FI's application form.
3. Upon receipt of the application, KSECF shall request the FI to confirm that the project is considered eligible for a loan from the FI and that the FI is proceeding with the due diligence for the borrower and the project.
4. Upon receiving such confirmation from the FI, KSECF shall review the submitted information to assess whether the application meets the eligibility requirements.
5. If the project does not meet the requirements, KSECF shall return it to the applicant and inform the relevant FI that the project does not meet the eligibility requirements of the IBD scheme.
6. If the project meets the requirements, KSECF shall so inform the applicant and the FI, and request the FI to complete the credit analysis and other due diligence for the application.
7. Once the FI approves the loan for the project and determines the terms and conditions of the loan, KSECF shall calculate the amount of payment to be made to buy down the interest rate by 4% for a period of no more than 5 years. An example of the calculation is shown below.
8. KSECF shall then sign a project agreement with the FI to provide a front-end lump sum payment to the FI at the time of the loan closing to buy down the interest rate. The Agreement shall also specify that the FI shall use the lump sum payment to reduce the interest rate on the loan and shall NOT provide the payment directly to the borrower.
9. The borrower shall be required to provide to KSECF a Certificate of Completion within 60 days of the completion of installation of the EE measures verifying that the EE measures proposed in the Application have been installed. Failure to provide such a Certificate of Completion shall constitute an Event of Default and the Interest Buy-Down shall be forfeited by the borrower.
10. The FI shall be required to provide to KSECF a "Return Payment" in case

the Certificate of Completion is not provided by the borrower, or if the borrower's loan is retired at a date earlier than five years.

Calculation of Lump-sum Payment for Interest Buy-Down

KSECF shall calculate the lump-sum front-end payment to the FI by calculating the net present value, using a discount rate equal to the FI's standard commercial borrowing rate, of the difference between the monthly payment of the approved loan amount at the standard commercial borrowing rate and the reduced interest rate offered to the customer under this scheme (4% lower rate), with the calculation period being five years. An example of the calculation is provided below.

Loan Amount:	Rs. 80,00,000
Standard Borrowing Rate:	12%
KSECF Interest Buy-Down:	4%
Reduced Rate under IBD Scheme:	8%
Loan Term:	7 years
Monthly Payment at 12%:	Rs. 1,41,222
Monthly Payment at 8%:	Rs. 1,24,690
Difference:	Rs. 16,532
NPV of Difference over 5 years:	Rs. 9,36,521

In this example, with the loan amount at Rs. 80 lakhs and the standard borrowing rate of 12% annually, the 4% interest buy-down by KSECF amounts to a lump-sum payment to the FI of about 9.4 lakhs. The customer monthly payment is reduced from Rs. 1.41 lakhs to Rs. 1.25 lakhs.

Application Form

SECTION 4

ENERGY EFFICIENT APPLIANCE FINANCING SCHEME FOR DOMESTIC CUSTOMERS

SECTION 4 - ENERGY EFFICIENT APPLIANCE FINANCING SCHEME FOR DOMESTIC CUSTOMERS

INTRODUCTION

There is significant potential for energy savings in the domestic sector. Since much of the energy consumption in residences is for domestic appliances, the use of energy efficient appliances can contribute significantly to energy savings. However, since energy efficient appliances are more expensive than inefficient ones, domestic consumers are often not willing to invest their own funds to achieve the energy savings that will provide costs savings. The Bureau of Energy Efficiency has devised an energy efficiency rating program for domestic appliances and published a “star rating” scheme for refrigerators and air conditioners. Appliances with four or five stars are considerably more efficient than those with lower star ratings.

In this scheme, KSECF will create, in cooperation with a local financial institution and manufacturers of energy efficient refrigerators and air conditioners, an Energy Efficient Appliance Financing (EEAF) scheme that will provide zero interest financing and manufacturer rebates on four and five start rated refrigerators and air conditioners.

WHY ENERGY EFFICIENT APPLIANCE FINANCING?

The higher rated (four or five star) refrigerators and air conditioners may cost 30% to 50% more than inefficient appliances. While the higher efficiency appliances consume less energy and therefore are less expensive to operate, consumers are unwilling to pay the higher cost of the efficient appliances. KSECF will facilitate the purchase of efficient refrigerators and air conditioners by providing zero interest loans through a local financial institution (FI). In addition KSECF shall initiate a cooperative program with manufacturers of EE refrigerators and air conditioners under which the manufacturers will provide rebates for purchases of these appliances sin Kerala.

HOW WILL THE EEAF SCHEME WORK?

KSECF will select a financial institution (FI) interested in and willing to provide financing to domestic customers for purchase of four and five star refrigerators and air conditioners. KSECF will provide funds from the EEAF scheme to the FI to allow the customer to obtain one year zero interest loans for the appliance purchases. The FI will invite applications from customers for purchase of qualifying energy efficient appliances (initially four and five star refrigerators and air conditioners). The FI will conduct the appropriate credit analysis and due diligence of the proposed customer. The customer will get a zero interest loan payable over a one year period. KSECF will reimburse the FI for the interest cost of the loan.

In addition, KSECF will select using a competitive process a group of manufacturers and/or suppliers of four and five star refrigerators and air conditioners and promote these efficient appliances in cooperation with the selected manufacturers throughout Kerala. The manufacturers participating in the program will provide a rebate or discount to the customer purchasing the appliance. Thus the customers will get a double benefit from choosing to buy the efficient appliances - rebates plus a zero interest loans.

DESCRIPTION OF THE EELF SCHEME

The EEAF will operate as follows:

Customer Eligibility

The EELF scheme will be available to any domestic customer in Kerala.

Eligibility of Appliances

The EEAF scheme is applicable to four star and five star rated refrigerators and air conditioners.

Participating Financial Institution

KSECF will select a financial institution (FI) and sign a Participation Agreement with the FI. KSECF shall inform customers of the participating FI.

Interest Rate

The FI shall offer a zero interest loan to the customer. KSECF shall provide the FI with a lump-sum payment to cover the interest costs.

Loan Term

The term of the loan shall be one year.

Participating Manufacturers

KSECF shall select, using a competitive bid process, a group of manufacturers and suppliers of the eligible appliances and conduct a cooperative marketing and promotion campaign for the efficient appliances with these manufacturers/suppliers. The manufacturers and suppliers will be selected based on their willingness to offer a rebate or discount to customers in Kerala.

Fund Size

KSECF shall provide a fund of Rs. 30 lakhs as the initial financing for the EEAF scheme. Of this amount 20 lakhs will be for the interest subsidy to the FI and 10 lakhs for the cooperative marketing and promotion program. The size of the EEAF will be increased in future years.

Application Deadline

Applications for funding under the EEAF scheme should be submitted to the FI by no later than December 31, 2009. Applications will be reviewed by the FI on a first come first served basis as they are received, until the total budgeted funds are committed. If the available funds are exhausted while applications have been received and are still under review, these applications will be held in an "application pipeline" and will be processed if additional funds become available. However, no applications received after December 31, 2009 will be considered for funding under this year's budget.

Application and Review Process

The application and review process will follow the rules and procedures of the selected FI. These will be published by KSECF when the FI is selected.

Calculation of Payment for Interest subsidy to FI

KSECF shall calculate the lump-sum front-end payment to the FI by calculating the net present value of the interest costs, based on a negotiated commercial borrowing rate (negotiated with the FI at the beginning of the scheme). An example of the calculation is provided below.

Cost of Appliance:	Rs. 15,000
Negotiated Borrowing Rate:	12%
Interest Rate to Customer:	0%
Loan Term:	1 year
Monthly Payment at 12%:	Rs. 1,333
Monthly Payment at 0%:	Rs. 1,250
Difference:	Rs. 83
NPV of Difference:	Rs. 931

In this example, with the loan amount for the appliance is Rs. 15,000. The monthly payment at a rate of 12% annually would be Rs. 1,333. At a zero interest the monthly payment is Rs. 1,250. The NPV of the difference is Rs. 931, and this is the amount paid by KSECF to the FI.

Application Form

The Application Form for the EELF scheme will be prepared and published by the FI.

SECTION 5

ENERGY EFFICIENCY GRANT SCHEME
FOR PUBLIC SECTOR PROJECTS

SECTION 5 - ENERGY EFFICIENCY GRANT SCHEME FOR PUBLIC SECTOR PROJECTS

INTRODUCTION

Many public sector energy efficiency projects can provide high social value but the agency or organization sponsoring the project may not have access to funds for implementing the project or the economic payback from the project may be too long. In such situations it would be desirable to provide a grant to cover a portion of the project cost to facilitate the implementation of the project. One example of such a project is energy efficiency improvement in low-income housing where the residents do not have sufficient funds to invest in efficient equipment. Another example is energy efficiency improvement in public facilities such as public libraries, museums, etc. A portion of the KSECF funds shall be set aside for providing grants to such projects.

DESCRIPTION OF KSECF ENERGY EFFICIENCY GRANT SCHEME

KSECF offers grants for energy efficiency projects in the public sector to encourage and promote the implementation of energy efficiency projects in the public sector in cases where the project has a high social value and the project sponsor is not able to obtain funding for the project without some assistance in the form of a grant. A description of the Energy Efficiency Grant scheme is provided below:

Eligible Organizations

The following types of facilities are eligible to apply for funds under the EAS scheme

- Public hospitals and health care facilities
- State and local government buildings
- Municipal pumping facilities (water treatment, waste water, etc.)
- Municipalities operating street lighting
- Public universities and colleges
- Public schools
- Religious facilities
- Low income housing

Eligibility of Project

Any EE project that provides energy and cost savings in a facility is eligible for the Energy Efficiency Grant (EEG) scheme, provided that:

- The energy efficiency project demonstrates high social value.
- It is supported by an energy audit conducted by an accredited energy auditor
- The DPR is submitted with the application

- The simple payback for the project (capital costs divided by average annual cost savings) is not less than one years and not more than seven years.

Amount of Funding Provided

KSECF will provide up to 50% of the cost of the public sector energy efficiency project as a grant up to the maximum specified herein.

Maximum Amount

The maximum amount of funding provided by KSECF as a grant for a single project shall be the lesser of Rs. 2 lakhs or 30% of the facility's annual energy consumption during the prior year.

Total Budget

The total budget for this scheme during the fiscal year 2009-2010 is Rs. 20 lakhs.

Application Deadline

Applications for funding under the EEG scheme should be submitted to KSECF by no later than December 31, 2009. However, applications will be considered on a first come first served basis as they are received, until the total budgeted funds are committed. If the available funds are exhausted while applications have been received and are still under review, these applications will be held in an "application pipeline" and will be processed if additional funds become available. At the discretion of KSECF, these applications may be considered or requested to be resubmitted under the subsequent year funding. However, no applications received after December 31, 2009 will be considered for funding under this year's budget.

Application and Review Process

Any eligible facility may submit an application using the EEG Application Form.

Upon receipt of the application, KSECF shall review the submitted information to assess whether the application meets the eligibility requirements including the statement of social value provided. If it does not meet the requirements it shall be returned to the applicant. If it meets the requirements, KSECF shall inform the applicant that the application is under review.

After completion of the review KSECF may seek clarifications from the applicant with respect to technical, economic or financial aspects of the application, including the source of the funds for the portion of the project cost not covered by the Grant. When the application is approved, KSECF shall send an Approval Letter to the applicant.

Application Form

SECTION 6

PERORMANCE CONTRACTING SCHEME
FOR PUBLIC SECTOR PROJECTS

SECTION 6 - PERFORMANCE CONTRACTING SCHEME FOR PUBLIC SECTOR PROJECTS

INTRODUCTION

Many public sector buildings offer excellent opportunities for energy efficiency improvement because they have generally not been built efficiently, do not have energy efficient equipment, and have not invested in proper maintenance and operational practices. Often this situation arises due to limited budgets of public agencies. Even if assistance is provided to the agencies responsible for these facilities to identify energy efficiency opportunities, limitations of budget and staff skills and capabilities prevent these agencies from implementing EE projects. In such situations, the approach of performance contracting using energy service companies (ESCOs) can be an effective mechanism to implement EE projects.

WHAT IS PERFORMANCE CONTRACTING?

Performance contracting refers to energy efficiency implementation services offered by private sector organizations Known As Energy Service Companies (ESCOs) that are characterized by the following key attributes:

- ESCOs offer a complete range of implementation services, including design, engineering, construction, commissioning, and maintenance of the energy efficiency measures, and monitoring and verification of the resulting energy and cost savings.
- ESCOs also offer financing (often 100%) and undertake "shared savings" contracts, such that the payments to the performance contractor are less than the cost savings resulting from the project implementation.
- ESCOs offer specific performance guarantees for the entire project (as opposed to individual equipment guarantees offered by equipment manufacturers or suppliers) and generally will guarantee a level of energy and/or cost savings.
- Payments to the ESCO are contingent upon demonstrated satisfaction of the performance guarantees.
- Most of the technical, financial, and maintenance risk is assumed by the ESCO thereby substantially reducing the risks to the municipality.

A number of public agencies in India have implemented the performance contracting approach. Examples include the Gujarat Energy Development Agency, Pune Municipal Corporation, and the Tamil Nadu Urban Development Fund.

BENEFITS OF PERFORMANCE CONTRACTING

The potential benefits for public agencies to use the performance contracting approach include:

- Such an approach will provide performance guarantees to assure the successful implementation of the efficiency measures.

- The ESCOs will be prepared to provide operation and maintenance services to assure that the installed equipment continues to perform at a high level of efficiency.
- A mutually agreed upon monitoring and verification (M&V) scheme will be established to allow for actual measurement and demonstration of the energy and cost savings.
- The ESCOs provide breadth and depth of capabilities as well as training to public agency staff.
- The public agency will be able to access external capital for project implementation.
- The public agency will substantially reduce its risks.

DESCRIPTION OF KSECF'S PERFORMANCE CONTRACTING SCHEME

KSECF will provide assistance to public agencies in Kerala to adopt the performance contracting process for implementing energy efficiency projects in public agencies. KSECF will develop the rules and procedures for engaging ESCOs under performance contracts to implement EE projects in the public sector in Kerala. KSECF will assist interested public agencies in Kerala in developing the Requests for Expressions of Interest for qualifying and short-listing ESCOs and the more detailed Requests for Proposals to select the ESCO as a performance contractor. KSECF will provide the technical assistance, funding and other needed resources for implementing the performance contracting process.

Eligible Organizations

Any public sector agency in Kerala is eligible to apply to KSECF for assistance under this scheme. Examples include:

- State and local government buildings
- Municipal pumping facilities (water treatment, waste water, etc.)
- Municipalities operating street lighting
- Public universities and colleges
- Public schools
- Public hospitals and health care facilities

How will the Performance Contracting Scheme be carried out?

During the fiscal year 2009-2010, KSECF will work with one or two public agencies to design and implement the performance contracting scheme. The key steps are as follows:

1. KSECF shall develop the performance contracting process, including the sample Request for EOI and RFP documents.
2. KSECF shall solicit interest from public agencies in Kerala who are interested and willing to carry out the performance contracting process.
3. KSECF shall meet and discuss with interested agencies the specific potential projects that may be suitable for performance contracting.

4. Based on these discussions, KSECF shall select one or two agencies to implement the pilot performance contracting approach.
5. Working with these agencies KSECF shall select the facility or facilities that in which the energy efficiency projects will be implemented.
6. KSECF shall announce to the ESCO industry that it is planning to use the performance contracting approach for EE [projects in public facilities in Kerala, and that the first pilot projects will be implemented in the current fiscal year.
7. KSECF shall fund energy audits of the selected facilities to identify the EE projects and measures.
8. In cooperation with the selected agency (ies), KSECF shall develop the evaluation and selection process and criteria for ESCOs.
9. KSECF shall issue a Request for Expressions of Interest (EOI) from ESCOs and other energy service providers who are interested and willing to enter into performance contracts for these projects.
10. KSECF and the cognizant agency shall review the EOIs using the pre-established evaluation criteria and develop a short list of ESCOs for issuing the Request for Proposals (RFP).
11. KSECF shall issue the RFP o the short listed ESCOs.
12. KSECF and the cognizant public agency shall review the proposals submitted by the ESCOs an select the best proposal for contract negotiation.
13. KSECF shall assist the agency in negotiating then performance contract.
14. KSECF shall provide technical assistance in the monitoring and evaluation of the project performance.
15. KSECF shall document the results of the process and encourage other public agencies to participate in the Performance Contracting Scheme in future years.

Project Size

In order to encourage a number of ESCOs to participate in the competitive selection process, KSECF shall select projects that are between 1 to 5 crores in terms of total project investment.

Funding

KSECF shall fund the costs of the technical assistance and the energy audits for the current fiscal year program. KSECF shall also absorb the costs related to the process of issuing and evaluating EOIs and RFPs and selecting and negotiating a contract with the winning ESCO.

Budget

The KSECF budget for the fiscal year 2009-2010 for the Performance Contracting Scheme is Rs. 20 lakhs.

Selection of Agencies and Schedule

KSECF shall solicit interest form public agencies for participating in this scheme by June 2009 and select one or two agencies by July 2009. The audits of the selected facilities shall be completed by September 2009 and contracts with the selected ESCOs concluded by February 2010.

SECTION 7

PARTIAL CREDIT GUARANTEE SCHEME

SECTION 7 - PARTIAL CREDIT GUARANTEE SCHEME

INTRODUCTION

The interviews and assessments conducted with project hosts, energy service providers, equipment suppliers, and financial institutions in Kerala during the design of the KSECF pointed out that most industrial and commercial facilities in Kerala do not have adequate capital or are unwilling to invest their own capital for EE projects. There is no ESCO industry in Kerala, and the fledgling ESCO industry in India is substantially undercapitalized and not capable of mobilizing sufficient financial resources to implement many EE projects. At the same time, financial institutions are reluctant to fund EE projects (or hosts) that they either do not understand or perceive to be too risky. Discussions with financial institutions also pointed out the following perceptions:

- Many industrial companies in Kerala may be considered to be financially "stressed".
- ESCO sponsors have limited equity raising and debt abilities and limited balance sheets.
- Because a substantial track record of EE projects has not yet been built up, project implementation skills of ESCOs and hosts are viewed as potential risks.
- Financial transaction costs are relatively high as most projects are small, and there has not been sufficient activity for streamlined processes to have been developed.
- Energy savings monitoring and verification protocols have to be standardised and made as objective as possible.
- Standardised financing and project agreements need improvement.

The Consultative Meeting with financial institutions ion Kerala held as part of the design of the KSECF in October 2008 demonstrated the FIs' view that liquidity is not an issue in financing EE projects. What is needed is risk sharing to reduce the perceived risk of the financial institutions. In addition to conventional risk sharing mechanisms through project contracts, there is a strong need for credit enhancement to provide comfort to lenders.

PARTIAL CREDIT GUARANTEES

The situation in Kerala with respect to commercial financing of EE projects is analogous to what has been faced in a number of developing countries. A scheme that has been successfully utilized to address the financing issue in these situations is the partial credit guarantee. Under such a scheme, an organization interested in promoting EE project implementation provides a risk sharing facility through a partial credit (or risk) guarantee (PCG) to a commercial financial institution (FI) that provides loans to project proponents. By offering a mechanism to share the risk of loan default, the PCG scheme reduces the FI's financing risk. This approach has been very successfully used by the International Finance Corporation (IFC) in cooperation with the Global Environment Facility (GEF) to substantially stimulate the market for commercial financing of EE projects in a number of Eastern and Central European countries and is currently being implemented in China, Russia and other countries. The credit guarantee approach has also been applied successfully in a number of other economic sectors in many countries, particularly for small and medium size industries. An excellent example in India is the Credit Guarantee Trust Fund for Micro and Small Enterprises (CGTMSE).

CREDIT GUARANTEE TRUST FUND FOR MICRO AND SMALL ENTERORISES (CGTMSE)

With a view to resolving the problem of collaterals, and to induce banks to gradually move away from a completely risk-averse stance towards SSIs, Ministry of Micro, Small & Medium Enterprises (MSME), Government of India launched Credit Guarantee Scheme (CGS) so as to strengthen credit delivery system and facilitate flow of credit to the MSE sector. To operationalize this scheme, the Government of India and the Small Industries Development Bank of India (SIDBI) set up the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) for ensuring collateral security free loans to Small Entrepreneurs and SSIs.

The main objective of CGTMSE is that the lender should give importance to project viability and secure the credit facility purely on the primary security of the assets financed. The other objective is that the lender availing guarantee facility should endeavor to give composite credit to the borrowers so that the borrowers obtain both term loan and working capital facilities from a single agency. The Credit Guarantee scheme (CGS) seeks to reassure the lender that, in the event of a MSE unit, which availed collateral free credit facilities, fails to discharge its liabilities to the lender, the Guarantee Trust would make good the loss incurred by the lender up to 75 / 80/ 85 per cent of the credit facility.

Any collateral / third party guarantee free credit facility (both fund as well as non fund based) extended by eligible institutions, to new as well as existing Micro and Small Enterprise, including Service Enterprises, with a maximum credit cap of Rs.100 lakh (Rupees Hundred lakh only) are eligible to be covered. The guarantee cover available under the scheme is to the extent of 75% / 80% of the sanctioned amount of the credit facility, with a maximum guarantee cap of Rs.62.50 lakh / Rs. 65 lakh. The extent of guarantee cover is 85% for micro enterprises for credit up to Rs.5 lakh.

The extent of guarantee cover is 80%(i) Micro and Small Enterprises operated and/or owned by women; and (ii) all credits/loans in the North East Region (NER). In case of default, Trust settles the claim up to 75% (or 80%) of the amount in default of the credit facility extended by the lending institution.

KSECF CREDIT GUARANTEE SCHEME

The KSECF Credit Guarantee Scheme for Energy Efficiency Projects will provide guarantee cover on loans made by participating financial institutions for EE projects without collateral/third party guarantees in a manner similar to that provided under the Credit Guarantee Fund for Micro and Small Enterprises (CGTMSE). The KSECF Credit Guarantee Scheme for Energy Efficiency Projects (CGS) will be patterned along the same lines but with some modifications. A higher level of guarantee cover will be provided to give greater comfort to lending institutions. The guarantee cover provided by the Fund will be separate and in addition to that available to small industries under CGTMSE so that the benefit of availing CGTMSE for their normal business needs is not affected. The guarantee cover will also be made available to medium and smaller large enterprises that are not covered under CGTMSE.

KSECF will work closely with CGTMSE, and would request the CGTMSE to administer the scheme for which KSECF would pay a processing fee for all transactions (for providing guarantee cover and making guarantee payments, if necessary).

Under this scheme, assistance will be available to SME units and smaller large units in the industrial sector, and owners of commercial buildings. It will also be available to ESCOs for EE projects in SME units and smaller large industrial units, EE projects in privately or government owned buildings, and street-lighting and water pumping EE projects in Urban Local Bodies.

DESCRIPTION OF THE PARTIAL CREDIT GUARANTEE SCHEME

Facility Eligibility

The following types of facilities are eligible to apply for funds under the EAS scheme

- Smaller Industrial plants
- Commercial buildings
- Hospitals and health care facilities
- Universities and colleges
- Schools
- Multifamily buildings

The facility needs to meet the criteria for borrowers established by the financial institutions participating in the PCG scheme.

Eligibility of Project

Any EE project that provides energy and cost savings in an eligible facility is eligible for the PCG scheme, provided that:

- It is supported by an energy audit conducted by an accredited energy auditor.
- The DPR is submitted with the application to the FI.
- The simple payback for the project (capital costs divided by average annual cost savings) is not less than two years and not more than seven years.

Participating Financial Institutions

KSECF shall work with a number of participating financial institutions, who will sign a Risk Sharing Facility Agreement (RSFA) with KSECF. A list of participating FIs will be published by KSECF.

Project Size

The minimum project size shall be established by the participating FIs. The maximum project size may also be established by the FI, but KSECF will provide a guarantee of no more than Rs. 10 lakhs per project in the first year of the scheme.

Total Budget

The total budget for this scheme during the fiscal year 2009-2010 is Rs. 30 lakhs.

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